WorldCat: Estimation of the case mix variation among specialties

OCLC 713311610	**HEC Holdings - no other holdings**				
Books	**Rec Stat** n	**Entered** 20110419	**Replaced** 20110419114211.9		
Type a	**ELvl** I	**Srce** d	**Audn**	**Ctrl**	**Lang** eng
BLvl m	**Form** r	**Conf** 0	**Biog**	**MRec**	**Ctry** cau
	Cont	**GPub** o	**LitF** 0	**Indx** 0	
Desc a	**Ills**	**Fest** 0	**DtSt** s	**Dates** 1980,	

040		HEC ‡c HEC
041		eng
090		R728 ‡b .B47 1980
090		
049		HECA
100	1_	Berry, Robert R.
245	10	Estimation of the case mix variation among specialties / ‡c submitted by R. Berry.
260		Berkeley, Calif. : ‡b Teknekron Research, Inc., ‡c [1980?]
300		47 leaves ; ‡c 28 cm.
500		Supported by HCFA contract no. 500-78-0052.
500		"Option year 1."
513		Final report.
533		Photocopy. ‡b Berkeley, Calif. : ‡c Teknekron Research, Inc., ‡d [1980?]. ‡e 28 cm.
610	20	National Ambulatory Medical Care Survey (U.S.)
650	_0	Physician practice patterns ‡x Economic aspects ‡z United States.
650	_0	Medicine ‡x Specialties and specialists ‡x Economic aspects ‡z United States.
650	_0	Physicians ‡x Time management.
650	_0	Physician and patient.
710	1_	United States. ‡b Health Care Financing Administration.
710	2_	Teknekron Research, Inc.

006 fields for Books	**Book**				
Ills	**Audn**	**Form**	**Cont**		
GPub o	**Conf** 0	**Fest** 0	**Indx** 0	**LitF** 0	**Biog**

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500-78-0052

ESTIMATION OF THE CASE MIX VARIATION AMONG SPECIALTIES

FINAL REPORT
OPTION YEAR 1
CONTRACT NO. 500-78-0052

Submitted by:
R. Berry

Project Manager:
R. Budnitz
Director,
Energy and Environmental
Technologies Division

Teknekron Research Inc.
2118 Milvia Street
Berkeley, California 94704

Submitted to:
Dr. Peter McMenamin
Dept. of Health & Human Services
330 Independence Ave., S.W.
Washington, D.C. 20201

TEKNEKRON
RESEARCH, INC.

STATEMENT OF COST AND PERSONNEL RESPONSIBLE FOR REPORT

This Report is made pursuant to Contract No. 500-78-0052. The charge to the Department of Health and Human Services for the work resulting in this report (inclusive of the amount so charged for any prior reports submitted under this contract) is $136,600. The names of the persons, employed or retained by the contractor with managerial or professional responsibility for such work or for the content of the report, are as follows

1. Robert R. Berry.

CASE MIX ANALYSIS

This report is the Final Report for Area 1 for Option Year 1 under HCFA Contract No. 500-78-0052. The Final Report for Area 1 work will comprise two parts: the case mix analysis presented here and the estimation of the weights for the Medicare Economic Index submitted separately. In this part of the Report, we analyze the characteristics of patient visits and their influence on the physician's allocation of time. These visit characteristics include the patient's background and complaint, the physician's diagnosis and treatment, and the case disposition, which usually are referred to collectively as the case mix of the physician practice.

This report presents a general model of the process of diagnosis and treatment and relates it to the use of resources in the physician firm. Data from the National Ambulatory Medical Care Survey (N.A.M.C.S.) are used to estimate a transformation of that model which focuses on the use of physician's time in moving from the patient's complaint to a specific diagnosis and treatment. We then compare the model's estimates for different physician specialties and find that specialties differ in their patterns of time spent in diagnosis and treatment.

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SECTION I

THE NATURE OF THE OFFICE VISIT

The office case load of most physicians can show considerable variation in the types of patient visits. These visits will differ in length and complexity even controlling for diagnosis and treatment. This difference can appear even in two sequential visits: an immunizaton can follow a visit for diagnosis of circulatory problems. Specialization reduces this diversity in the caseload but both specialists and general practitioners provide a variety of office services.

A complete model of the physician firm should include some measure of the diversity of output. Basically, physicians provide two traditional types of service, diagnosis and treatment, which are delivered separately as well as together. Both diagnosis and treatment themselves comprise several different types of actual service, and particularly treatment includes a variety of office procedures ranging from the writing of prescriptions to the performance of office surgery.

If a production or cost function for physician firms is estimated, then these services should enter either of these functions as separate and unique output measures rather than as one combined variable, office visits. As a partially satisfactory alternative, performing separate analyses for each physician specialty might control for the difference in case mix, and with this separation, visits might act as an adequate summary statistic of total output for each specialty. However, if this separation is not adequate, few if any samples include the detailed information on all inputs and outputs which are necessary to estimate a complete production or cost function. The N.A.M.C. Survey has disaggregated data on several measures of output but not on inputs, and vice versa for most other surveys of physician firms. Thus, analysis of the N.A.M.C. Survey can point to differences between specialities in diagnosis and treatment, but it will not permit a full estimation of a cost or production function.

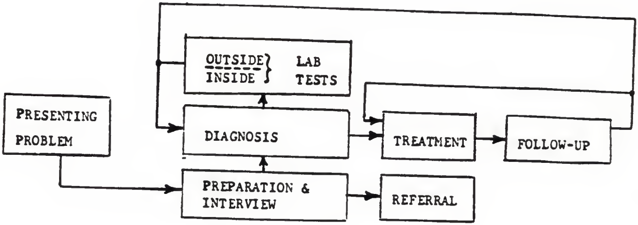
Examining the N.A.M.C. data suggests that the physician provides more than a single type of service in the office. In fact, the physician who provides both diagnosis and treatment in a complex case offers a series of services, often extending over several visits. The production of visits consists then not of a single event but a series of events with feedback loops to monitor the accuracy of the diagnosis and the efficacy of the treatment. Furthermore, each event has several output characteristics: a diagnosis, treatment(s), and disposition.

The entire process begins when the patient presents a problem to the physician, usually a specific abnormal symptom. A specific symptom is an important input to the physician's service because the more general the complaint, the greater are the time and resources required to diagnosis the problem. After the reported symptom, the physician might refer the patient to a specialist, order lab tests to determine or confirm the diagnosis or in straightforward problems, the physician might recommend and/or provide treatment in the initial visit. With more complex cases, the physician will conduct a series of lab tests and will revise the course of therapy as the tests indicate. Diagram 1 shows this process. Note the feedback loops from lab to diagnosis and from follow-up to treatment.

If the physician moves from receiving the presented problem to treatment in a single visit, then Figure 1 indicates that the firm has supplied several intermediate services to the patient. Some, like lab tests, might well be separately billed. In the multiple visit case, these intermediate services become final. (Some concern has arisen that some physicians might charge more for provision of separate services than for a single combined service. This is the subject of a separate study which would compare the treatments and follow-ups for similar problems and diagnoses.)

DIAGRAM 1.

A Schematic of the Flow of Services in the Office Visit



SECTION II

THE AGGREGATION OF VISITS

The above discussion indicates that the process by which a physician receives a patient's complaint and eventually prescribes a treatment can be complex and definitely not uniform across patients visits. To date, most economic analyses of the office practice have not explored the impact of this case mix variation on the organization of the practice. Because of data limitations, the typical analysis has implicitly assumed that patient visits are fairly homogenous and has used as the measure of output simply the total number of office visits. Using this total as the measure of output obscures the variation in the visit content. Clearly, office visits require differing degrees of physician experience and knowledge and the visits utilize varying amounts of collateral resources such as employee labor and supplies. Counting just total office visits implies that a physician who provides shorter but more numerous visits will appear more productive than a physician facing complex and lengthy procedures even if when measured by some independent standard both are equally productive given their respective case loads.

Because specialties exist to treat different problems, much of the impact of case mix variation, as noted above, can be handled by analyzing the specialties separately. Specialization, of course, reduces diversity within the specialty and leads to greater contrast among the caseloads of the separate specialties. Therefore, the investigator could use a simple measure of output such as office visits, recognizing that within any given specialty these visits will likely be quite similar but across specialties they will be rather different. However, formal and informal sub-specialization occurs within specialties as some physicians choose to treat an even narrower range of problems, usually complex cases requiring extended effort in diagnosis and treatment. Consequently, specialty specific analyses of physician firms--estimation of cost or production functions--might not completely control for differences in visit content. Case loads might differ significantly within as well as among specialties. Therefore, analyzing the physician practice by separating the specialties will only partly control for caseload differences. (Note still that a likely consequence of greater medical specialization is greater utilization of a physician's unique experience and training, more uniformity in the value of the service across visits for any one specialty, and increased likelihood of unique output value for each specialty.) Although the output of physician firms is heterogenous, most firms in other industries also produce a variety of services or products. The problem of controlling for the variety of output is not unique to the case of physician firms, just more extensive. Conventional production function analysis suggests two approaches to the problem: either include multiple output measures in the production function or aggregate these outputs in a way which is consistent with their relative value. The first approach applies fewer restrictions to the estimated parameters of the production function and requires less input data. However, the data requirements are still extensive: complete data on all inputs (i.e. office space, major equipment by type, employee hours by type) and outputs (i.e. the various services performed). The other approach of aggregation requires even more data if completed properly. The need for aggregation is extensive in other industries because most firms produce multiple products although few industries are characterized by specialization comparable to that of physicians'. Frequently, direct unweighted aggregation occurs along similar traditional product lines (e.g., tons of finished steel which can group several different products). With sufficient dis-similarity, proper aggregation requires some weighing of the individual outputs. In a competitive industry, the appropiate weight on each product is its share of total marginal cost or given profit maximization, each product's share of gross revenue. In the non-competitive case, these weights can still be used if the distortion has not changed relative product prices. Although the N.A.M.C. Survey includes extensive data on diagnosis and treatment, it does not have data on fees charged for these services nor does it have data on the prices or quantities of resource inputs other than physician time.

Given data limitations, other approaches have been suggested, including the construction of a case mix index which would collapse the information from several output variables into one index value which would measure the overall difficulty of the case load. Whether construction of such an index is possible without information on input or output prices is doubtful.

The specification of the request for Proposal for this Contract intended that the case mix analysis would produce just such an index which could be included in the estimation of the physician cost functions. The intent was that this index would measure the relative complexity of diagnosing and treating different types of cases. The Physician's Practice Cost Survey (P.P.C.S.), the basic data source for the work in this project, did not contain data on the types of cases treated by the responding physician. Therefore, the Request for Proposal recommended using the National Ambulatory Medical Survey (N.A.M.C.S.) database which focuses exclusively on the characteristics of the office visit. It suggested linking the N.A.M.C. and P.P.C. Surveys on a record by record basis by using some common variables which contain information on the types of treatment ordered by the physician. (Because the two Surveys did not sample the same physician population, no direct match of the records in the two surveys is possible and some indirect technique is required.)

Unfortunately, the recommended approach of using these common variables as a link will not achieve the objective of adding information on case mix variation to the Physician Practice Cost Survey records. This point was raised in the Base Year Report on Case Mix Analysis. Estimating a case mix relation from the N.A.C.M.S. by using these common treatment varibles as the right-hand variables in a regression model will yield an estimated function although since treatment is an output using it on the right-hand side of an equation raises the possibility of bias. Once such a regression were estimated, the second step would use the treatment variables from the P.P.C.S. as right-hand side or predictor variables in this estimated function to predict a case mix value for each observation in the P.P.C. Survey. But this approach will only estimate a new variable which is simply a linear combinaton of the predictors themselves which are part of the observation. If the predicted case mix variable is a linear combination of variables already in the P.P.C.S. record, then the predicted variable will not add variation to each record. Thus, this approach seems not very fruitful.

SECTION III

SOME DESCRIPTIVE DIFFERENCES IN VISITS AMONG SPECIALTIES

The remainder of this Report uses the N.A.M.C. Survey to estimate a model describing case mix differences among physician specialities. The model relates the length of visit to diagnosis and treatment, but it is incomplete because of data limitations in the Survey. As indicated above, if the specialties show significant differences in their case mix or in their response to it, then partitioning the sample by specialty can partly control for the effects of case mix differences.

Before presenting the length of visit regression model, some cross-tabulations of visit characteristics by specialty type are presented. As expected, these tables show that the separate specialties do treat cases with different characteristics, and consequently that resources used by the specialities will differ. The Survey asked each physician to report on the characteristics of up to 30 office visits per week which means the data base has multiple observations per physician. Relations among variables across these multiple observations will probably show dependency in the error terms leading to biased standard errors; this dependency may appear most likely in models with the length of visit variable. To correct for this problem in the tables presents a very difficult statistical task. The adjustment in the regressions is more straightforward but requires considerably increased computation effort: it would mean estimating a separate time series relation for the set of observations for each physician. This time series model is complicated by the fact that the sampled visits were intentionally separated to reduce the impact of this problem, which unfortunately does not eliminate the problem but only makes it harder to solve because the time series relation is more complex. As a simple solution, one observation per physician was sampled from the Survey using a quasi-random method.

Table 1 displays the distribution of case disposition by specialty. The Table has five specialty types with two types being aggregates: internal medicine specialties and surgical specialties. The case disposition describes the next type of contact which the physician recommends at the end of the visit which can range from no follow-up to admit to hospital. Each cell includes four entries which in order are the cell count, the row percentage, the column percentage and the overall table percentage. The specialty distribution and the order of the cell entries remain the same in Tables 1-4.

As Table 1 shows, patient visits generally form a sequence of contacts between the physician and the patient: overall in nearly 57 percent of the visits, a return visit is planned. (This statistic is downwardly biased because the last visit in a sequence will not report a return planned.) The N.A.M.C. Survey did not follow the sequence of visits and does not permit an examination of the complete treatment of one patient's problem. The case disposition variable does indicate the structure of the physician's case load: whether it consists primarily of single visits or sequences of visits. Physicians with mostly single visits will spend a greater part of each visit in diagnosis and a smaller part in treatment. This difference in emphasis produces different allocations of office resources, including supplies and employee labor. In forty-five percent of their visits, family practitioners do not recommend any follow-up other than a telephone call unless the problem persists. In contrast, surgeons and internists recommend a planned return in nearly sixty percent of their visits in order to complete diagnosis or continue treatment. The differences in case disposition among specialities is strongly significant with a chi-squared statistic of 268.6 which has an associated probability level of less than .001. To summarize, Table 1 shows that family practitioners have a greater proportion of visits without a return which means that given the same total visits, the family practitioners will have a greater turnover in the number of related visits than internists or surgeons.

Table 2 displays another cross-classification of case sequence by specialty. This measure of case sequence is the nature of the problem: whether it is acute, chronic, post-operative care or a well-patient exam. This measure also captures the relative turnover of the case load. as well as the immediacy of the problem. Note that the case load of family practitioners consists of over 50 percent acute or acute follow-up problems. Surgeons and surgical specialists, on the other hand, have only about 35 percent of their visits in these categories. Internal medicine specialists have a lower proportion of acute problems than either surgeons or family practitioners, about 30 percent. These specialists have a much higher proportion of their visits devoted to chronic problems, 62 percent, compared to about 33 percent for the family practitioners and about 20 and 34 percent for general surgeons and surgical specialists respectively. These differences among specialists are strongly significant with a chi-square statistic of 268.6.

As we shall see below when we discuss Table 4, the specialities differ quite significantly in the distribution of diagnoses which they treat, and the differences in Tables 1 and 2 reflect the combined effect of differences in both those diagnoses and treatments. The advantage of Tables 1 and 2 is that they present the impact of diagnosis and treatment in characteristics which are more readily comparable across specialities. Both also indicate a difference in the work environment across specialities. The family practitioners face many more routine and acute visits which require quicker diagnosis and treatment; on the other hand, specialists may spend a larger proportion of their time in diagnosis but through a sequence of planned visits which review the results of previous tests and treatments. This analysis only indicates a difference in the allocation of time between diagnosis and treatment across specialities, but if this difference could be more precisely defined and if one assigned different shadow prices to these activities, then one could derive a correct aggregate shadow price based on the actual mix of activities.

Table 3 is a cross-classification of specialty type by categories of visit length. The visit length measures the elapsed time during which the physician actually saw the patient, not the total time the patient was in the office or received treatment. The visit length categories are those in the N.A.M.C. Survey. Again, the separate specialities show significantly different patterns of behavior with the family practitioners having the shortest visits and the specialists having the longest. The family practitioners have 43.4 percent of the visits lasting between 6 to 10 minutes.

As indicated above, Table 4 presents the cross-classification of diagnosis and specialty. Diagnoses are grouped according to the major International Classification for Disease (Adapted for use in the United States) categories. To identify the numerical designations, refer to the list of variables following Table 4. Because of specialization, the specialities should differ significantly in their diagnostic patterns, and this is the result presented by Table 4. It shows that the specialists have less dispersed distributions. Note that 25 percent of the diagnoses of surgical specialists originate in the central nervous system while 28 percent of the diagnoses of the internal medicine specialists arise from skin disorders. (Small sample properties could explain part of this concentration if neurological surgeons and dermatologists were sampled at disproportionately high rates which could have occurred with the procedure used in sampling to obtain one observation per physician.) The most common diagnostic area across all specialities are problems of the circulatory system. The large chi-square statistic is not surprising given this specialization by physicians.

SECTION IV

A MODEL OF VISIT LENGTH

As the Tables above indicate, the variables in the N.A.M.C.S. permit a fairly complete characterization of office visits. Each Table, however, only presents a relationship between a pair of variables without controlling for the effects of other characteristics. To include these effects requires an explicit model and multivariate approach. One candidate for this model was reviewed above, the production function for the firm. As noted there, estimation of the production function requires not only complete information on visit types and characteristics but it also requires information on all inputs which with the exception of physician time are unavailable in the N.A.M.C. Survey. In addition, the Survey covered only office patient visits and excluded hospital or other outside visits. To the extent that these other visits affect the costs and organization of the practice, their exclusion will limit inferences from the analysis. Of course, models other than a production function will not be fully general in the sense of allowing inferences about economic parameters of the firm.

Two alternative models are quite closely related to the production function: the process model and the physician input demand function. The process model would relate the choice of treatment to the patient's complaint and diagnosis. Clearly, the complaint should affect the choice of diagnosis; and the diagnosis and complaint should strongly influence the choice of treatment. This model simply describes the process of moving through the steps from complaint to diagnosis, from diagnosis to choice of treatment and from treatment to disposition. In its estimated form, the complaint-diagnosis could be a two-dimensional table. The succeeding models would require multivariate estimation using a procedure such as the multinomial logit technique. A complication arises because the second and subsequent steps require the use of two-stage least squares; for instance, in the choice of procedure, the complaint and diagnosis are the right-hand variables but because diagnosis was hypothesized to be substantially affected by the complaint, the diagnosis variables should be treated as endogenous. Estimating this model would require the development of new software and is beyond the scope of this task effort but is nevertheless an interesting project.

The model which is estimated is an approximation to an input demand function for physician time. An input demand function should include input prices as well output measures but prices are not available in the Survey. The model as estimated includes only output measures; namely, the extensive visit characteristics included in the Survey. The advantage of the model lies in its use of the only continuous variable in the Survey as the dependent variable, physician time which is the duration of the direct patient-physician contact. Not only does this greatly simplify estimation, it also allows the construction of a case mix index. As indicated, the right hand variables include essentially all the Survey visit characteristics: patient background, complaint, diagnosis, treatment and case disposition. Thus, the model simply relates the length of the patient visit as the dependent variable to these visit characteristics as the right-hand side variables.

The estimated coefficients for the model report the partial effect of a given visit characteristic on length of visit. These coefficients do not necessarily represent an efficient or completely competent response by all physicians; they only report back the current physician response to given complaints and diagnoses. However, it is quite likely that this 'average' response is sufficiently competent and acceptably efficient in the sense that moves toward greater efficiency may be difficult to effect in the short run with current policy tools. Consequently, one could view this average response as a guide to the time required for completing a given diagnosis and treatment, and in this way the model estimates a case mix index which is tied to physician effort. The estimated coefficients might with considerable refinement act as a starting point for a relative value scale for office based procedures.

The regression results are presented in Tables 5 through 20 in four groups of four tables each. Again, the basic approach relates the length of the patient visit (in natural logs) to the visit characteristics. These are added to the regression stepwise in the order that they are presented to the physician in the visit. The first table in each set of four presents the situation as the physician first encounters the patient's background and hears the complaint, which is based on the N.A.M.C. coding system. Part of the patient's background consists of whether the patient or problem is new or old. In the next step presented as the second table in the group, the physician determines a diagnosis. The diagnostic codes are highly aggregated and follow the groupings in the International Classification for Disease. This system is organized around the major body systems (e.g. nervous system problems) and not around the difficulty of the diagnosis; diagnoses within the same major grouping can differ significantly in the time required for diagnosis. Note that since many visits are sequential, the diagnosis will not be determined finally until a later visit if the sampled visit is early in the sequence. This phenomenon of anticipated diagnosis is likely to occur if the physician wants to provide a diagnosis for the sake of coding the Survey form even though the diagnosis itself has not been firmly established. In the third step which corresponds to the third regression in each group, the physician decides on a treatment if one is necessary; the treatments are rather broadly defined by N.A.M.C. Also the Survey only asked if the treatment procedure was ordered or provided; not distinguishing between these two alternatives introduces considerable unexplained variance into the relation between the procedure choice and the length of visit. In the fourth and final step, the physician decides on a case disposition which can range from no return planned if the problem needs no follow-up to return at specified time. To summarize, these variables enter the regression in four steps and the results are presented in four separate tables for each specialty group.

The first set of four tables presents the results for general practitioners, the second set for internal medicine and its specialties, the third set for surgery and surgical specialties and the fourth set for the combined sample. The purpose of performing the step-wise regressions was to find if the variables at each of the steps added significantly to the explanation to the length of the visit. The purpose of separating the specialties was to determine whether significant differences existed in their patterns of allocating time to these various aspects of diagnosis and treatment. Thus, we are testing two different hypotheses. The first attempts to identify the relation between visit length and visit characteristics to find which activities appear to require the greatest time. The second tests the homogeneity of that relation across specialties.

The statistical results are summarized in Table 21. In each of the first four columns are the F-statistics for the step-wise test of the visit relationship. For example, the entry in the upper left hand corner is the F-statistic for for general practitioners for those 'base' variables--patient background, status and complaint--which the physician usually determines at visit outset. The F-statistic of 1.276, based on an R-squared of 0.103 from Table 5, is less than the cutoff of 1.55 at the five percent level of confidence. The result indicates that the time required to gather the information on these background or base variables is nearly non-existent. The result implies that general practitioners have their office employees gather much of this information and that the physician reviews it before entering the examining room. Note that gathering this information does require a significant amount of time for internists and surgeons (F-statistics of 3.638 and 2.365 respectively, both of which are significant at five percent).

Only in the case of internists does the additional time taken to reach a diagnosis approach significance. The proper interpretation here maybe that little time is required to determine which of the broad I.C.D. categories is appropriate. More disaggregation of diagnostic categories would be desirable and could be achieved by restricting the sample to the more frequently encountered problems in each specialty.

Ordering or providing a procedure which may be diagnostic as well as therapeutic does take a significant additional amount of time for all specialties, particularly for surgeons. Finally, deciding upon the case disposition and followup at the end of the visit apparently requires little additional physician effort.

The final column in Table 21 shows the results of the test of homogeneity across specialties. As expected, the specialties do differ significantly at each of the four stages of the visit in their patterns of time allocation. These results suggest that because of specialization, the specialty designation provides a rough first cut in distinguishing among visit types.

SECTION V

A COMPARISON OF N.A.M.C.S. and P.P.C.S. RESULTS

Both the N.A.M.C. and P.P.C. Surveys asked physicians about the amount of time spent with patients and the choice of procedures. If one were considering linking these two Surveys as was described above (which is admittedly a not very useful task), then a first step would be checking to determine if physicians had responded consistently to these common questions.

Table 22 presents the results of a regression in which specialty designations and the ordering or providing of four procedures explain the length of the visit. These four procedures are lab tests, injection, X-ray, and office surgery. Note the sizable differences between the two intercept terms which indicates that in the P.P.C.S., the physician responded with more than just the direct patient contact time.

Comparing the coefficients reveals that the additional time taken to order or provide a lab test is not significantly different between the two Surveys. The value of the F-statistic is only 0.692. The test statistic for equality of coefficients across the four procedures is 10.245 which suggests strong differences in the time required for providing the remaining three procedures. However, this difference may be exaggerated because physicians in the P.P.C. Survey responded with total patient time, not patient contact time. Even with this adjustment, it appears that a N.A.M.C.S. respondent indicated that ordering office surgery requires a little more than 8 minutes of patient contact. A respondent to the P.P.C.S. indicated that this would take a little more than 2 minutes, a somewhat surprising result. These discrepancies indicate that physicians may well have responded differently to these common questions.

TABLE 1

CROSS-CLASSIFICATION
OF
CASE DISPOSITION BY SPECIALTY
(Data: Physician sample from 1976 NAMCS)

```
                         MEDSPEC
                  COUNT I
                ROW PCT IFAMILY   INTERNAL INTERNAL GENERAL  SURGERY     ROW
                COL PCT IPRACTICE MEDICIN  SPECL    SURG     SPECL       TOTAL
                TOT PCT I      1.I      2.I      3.I      4.I      5.I
DISP            --------I--------I--------I--------I--------I--------I
                     1. I     57 I     21 I      8 I     16 I     30 I    132
 NO        FOLLOWUP     I   43.2 I   15.9 I    6.1 I   12.1 I   22.7 I   11.1
                        I   14.4 I    9.8 I    8.0 I    9.2 I    9.9 I
                        I    4.8 I    1.8 I    0.7 I    1.3 I    2.5 I
                       -I--------I--------I--------I--------I--------I
                     2. I    202 I    131 I     65 I     99 I    178 I    675
 RETURN  PLANNED        I   29.9 I   19.4 I    9.6 I   14.7 I   26.4 I   56.9
                        I   51.1 I   60.9 I   65.0 I   57.2 I   58.6 I
                        I   17.0 I   11.0 I    5.5 I    8.3 I   15.0 I
                       -I--------I--------I--------I--------I--------I
                     3. I    108 I     40 I     18 I     35 I     60 I    261
 RETURN  IF NEC         I   41.4 I   15.3 I    6.9 I   13.4 I   23.0 I   22.0
                        I   27.3 I   18.6 I   18.0 I   20.2 I   19.7 I
                        I    9.1 I    3.4 I    1.5 I    2.9 I    5.1 I
                       -I--------I--------I--------I--------I--------I
                     4. I     13 I      9 I      4 I      3 I      3 I     32
 TELEPHON FOLLOWU       I   40.6 I   28.1 I   12.5 I    9.4 I    9.4 I    2.7
                        I    3.3 I    4.2 I    4.0 I    1.7 I    1.0 I
                        I    1.1 I    0.8 I    0.3 I    0.3 I    0.3 I
                       -I--------I--------I--------I--------I--------I
                     5. I     12 I      5 I      1 I      3 I      6 I     27
 REFERRAL OUT           I   44.4 I   18.5 I    3.7 I   11.1 I   22.2 I    2.3
                        I    3.0 I    2.3 I    1.0 I    1.7 I    2.0 I
                        I    1.0 I    0.4 I    0.1 I    0.3 I    0.5 I
                       -I--------I--------I--------I--------I--------I
                     6. I      0 I      1 I      2 I      3 I      3 I      9
 RETURN  TO REFER       I    0.0 I   11.1 I   22.2 I   33.3 I   33.3 I    0.8
                        I    0.0 I    0.5 I    2.0 I    1.7 I    1.0 I
                        I    0.0 I    0.1 I    0.2 I    0.3 I    0.3 I
                       -I--------I--------I--------I--------I--------I
                     7. I      3 I      6 I      2 I     11 I     22 I     44
 ADMIT TO HOSPITA       I    6.8 I   13.6 I    4.5 I   25.0 I   50.0 I    3.7
                        I    0.8 I    2.8 I    2.0 I    6.4 I    7.2 I
                        I    0.3 I    0.5 I    0.2 I    0.9 I    1.9 I
                       -I--------I--------I--------I--------I--------I
                     8. I      0 I      2 I      0 I      3 I      2 I      7
 OTHER   DISP           I    0.0 I   28.6 I    0.0 I   42.9 I   28.6 I    0.6
                        I    0.0 I    0.9 I    0.0 I    1.7 I    0.7 I
                        I    0.0 I    0.2 I    0.0 I    0.3 I    0.2 I
                       -I--------I--------I--------I--------I--------I
                 COLUMN      395      215      100      173      304     1187
                  TOTAL     33.3     18.1      8.4     14.6     25.6    100.0
```

Chi Square = 66.02419 with 28 degrees of freedom.
Significance = 0.0001

TABLE 2

CROSS-CLASSIFICATION
OF
PROBLEM DESCRIPTION BY SPECIALTY

(Data: Physician sample from 1976 NAMCS)

```
                     MEDSPEC
              COUNT I
            ROW PCT IFAMILY   INTERNAL INTERNAL GENERAL  SURGERY     ROW
            COL PCT IPRACTICE MEDICIN  SPECL    SURG     SPECL       TOTAL
            TOT PCT I       1.I       2.I       3.I       4.I       5.I
REASON      --------I--------I--------I--------I--------I--------I
                 1. I    140 I     56 I     18 I     47 I     58 I    319
ACUTE       PROBLEM I   43.9 I   17.6 I    5.6 I   14.7 I   18.2 I   26.9
                    I   35.4 I   26.0 I   18.0 I   27.2 I   19.1 I
                    I   11.8 I    4.7 I    1.5 I    4.0 I    4.9 I
                   -I--------I--------I--------I--------I--------I
                 2. I     62 I     18 I     12 I     12 I     50 I    154
ACUTE      FOLLOWUP I   40.3 I   11.7 I    7.8 I    7.8 I   32.5 I   13.0
                    I   15.7 I    8.4 I   12.0 I    6.9 I   16.4 I
                    I    5.2 I    1.5 I    1.0 I    1.0 I    4.2 I
                   -I--------I--------I--------I--------I--------I
                 3. I     91 I     91 I     44 I     20 I     68 I    314
CHRONIC     PROBLEM I   29.0 I   29.0 I   14.0 I    6.4 I   21.7 I   26.5
                    I   23.0 I   42.3 I   44.0 I   11.6 I   22.4 I
                    I    7.7 I    7.7 I    3.7 I    1.7 I    5.7 I
                   -I--------I--------I--------I--------I--------I
                 4. I     39 I     27 I     18 I     15 I     35 I    134
CHRONIC FLAREUP     I   29.1 I   20.1 I   13.4 I   11.2 I   26.1 I   11.3
                    I    9.9 I   12.6 I   18.0 I    8.7 I   11.5 I
                    I    3.3 I    2.3 I    1.5 I    1.3 I    2.9 I
                   -I--------I--------I--------I--------I--------I
                 5. I     11 I      2 I      2 I     63 I     63 I    141
POSTOPER CARE       I    7.8 I    1.4 I    1.4 I   44.7 I   44.7 I   11.9
                    I    2.8 I    0.9 I    2.0 I   36.4 I   20.7 I
                    I    0.9 I    0.2 I    0.2 I    5.3 I    5.3 I
                   -I--------I--------I--------I--------I--------I
                 6. I     29 I     17 I      3 I      9 I     12 I     70
WELLEXAM            I   41.4 I   24.3 I    4.3 I   12.9 I   17.1 I    5.9
                    I    7.3 I    7.9 I    3.0 I    5.2 I    3.9 I
                    I    2.4 I    1.4 I    0.3 I    0.8 I    1.0 I
                   -I--------I--------I--------I--------I--------I
                 7. I     23 I      4 I      3 I      7 I     18 I     55
OTHER    REASON     I   41.8 I    7.3 I    5.5 I   12.7 I   32.7 I    4.6
                    I    5.8 I    1.9 I    3.0 I    4.0 I    5.9 I
                    I    1.9 I    0.3 I    0.3 I    0.6 I    1.5 I
                   -I--------I--------I--------I--------I--------I
             COLUMN      395      215      100      173      304     1187
              TOTAL     33.3     18.1      8.4     14.6     25.6    100.0
```

Chi Square = 268.60327 with 24 degrees of freedom

Significance = 0.0

TABLE 3

CROSS-CLASSIFICATION
OF
LENGTH OF VISIT BY SPECIALTY
(Data: Physician sample from 1976 NAMCS)

```
                 MEDSPEC
           COUNT I
         ROW PCT IFAMILY   INTERNAL INTERNAL GENERAL  SURGERY    ROW
         COL PCT IPRACTICE MEDICIN  SPECL    SURG     SPECL     TOTAL
         TOT PCT I      1.I      2.I      3.I      4.I      5.I
LENGTH   --------I--------I--------I--------I--------I--------I
              1. I      6 I      2 I      1 I      0 I      3 I     12
  ZERO   MINUTES I   50.0 I   16.7 I    8.3 I    0.0 I   25.0 I    1.0
                 I    1.5 I    0.9 I    1.0 I    0.0 I    1.0 I
                 I    0.5 I    0.2 I    0.1 I    0.0 I    0.3 I
                -I--------I--------I--------I--------I--------I
              2. I     56 I     14 I      7 I   . 18 I     27 I    122
  1- 5   MINUTES I   45.9 I   11.5 I    5.7 I   14.8 I   22.1 I   10.3
                 I   14.2 I    6.5 I    7.0 I   10.4 I    8.9 I
                 I    4.7 I    1.2 I    0.6 I    1.5 I    2.3 I
                -I--------I--------I--------I--------I--------I
              3. I    151 I     37 I     25 I     60 I     75 I    348
  6-10   MINUTES I   43.4 I   10.6 I    7.2 I   17.2 I   21.6 I   29.3
                 I   38.2 I   17.2 I   25.0 I   34.7 I   24.7 I
                 I   12.7 I    3.1 I    2.1 I    5.1 I    6.3 I
                -I--------I--------I--------I--------I--------I
              4. I     89 I     64 I     22 I     47 I     83 I    305
 11-15   MINUTES I   29.2 I   21.0 I    7.2 I   15.4 I   27.2 I   25.7
                 I   22.5 I   29.8 I   22.0 I   27.2 I   27.3 I
                 I    7.5 I    5.4 I    1.9 I    4.0 I    7.0 I
                -I--------I--------I--------I--------I--------I
              5. I     83 I     69 I     28 I     42 I     94 I    316
 16-30   MINUTES I   26.3 I   21.8 I    8.9 I   13.3 I   29.7 I   26.6
                 I   21.0 I   32.1 I   28.0 I   24.3 I   30.9 I
                 I    7.0 I    5.8 I    2.4 I    3.5 I    7.9 I
                -I--------I--------I--------I--------I--------I
              6. I      8 I     25 I     13 I      6 I     22 I     74
 31-60   MINUTES I   10.8 I   33.8 I   17.6 I    8.1 I   29.7 I    6.2
                 I    2.0 I   11.6 I   13.0 I    3.5 I    7.2 I
                 I    0.7 I    2.1 I    1.1 I    0.5 I    1.9 I
                -I--------I--------I--------I--------I--------I
              7. I      2 I      4 I      4 I      0 I      0 I     10
 OVER 60 MINUTES I   20.0 I   40.0 I   40.0 I    0.0 I    0.0 I    0.8
                 I    0.5 I    1.9 I    4.0 I    0.0 I    0.0 I
                 I    0.2 I    0.3 I    0.3 I    0.0 I    0.0 I
                -I--------I--------I--------I--------I--------I
          COLUMN      395      215      100      173      304     1187
           TOTAL     33.3     18.1      8.4     14.6     25.6    100.0
```

Chi Square = 103.00412 with 24 degrees of freedom.
Significance - 0.0000

TABLE 4

CROSS-CLASSIFICATION OF INTERNATIONAL CLASSIFICATION OF DISEASE CATEGORIES BY SPECIALTY

(Data: Physician sample from 1976 NAMCS)

```
                    MEDSPEC
              COUNT I
            ROW PCT IFAMILY   INTERNAL INTERNAL GENERAL  SURGERY   ROW
            COL PCT IPRACTICE MEDICIN  SPECL    SURG     SPECL     TOTAL
            TOT PCT I     1.I     2.I     3.I     4.I     5.I
DIAGCAT     --------I-------I-------I-------I-------I-------I
                 1. I      1 I      0 I      2 I      1 I      1 I      5
    BETWEEN 000-136 I   20.0 I    0.0 I   40.0 I   20.0 I   20.0 I    0.4
                    I    0.3 I    0.0 I    2.0 I    0.6 I    0.3 I
                    I    0.1 I    0.0 I    0.2 I    0.1 I    0.1 I
                   -I-------I-------I-------I-------I-------I
                 2. I      0 I      9 I      5 I     23 I      6 I     43
    BETWEEN 140-239 I    0.0 I   20.9 I   11.6 I   53.5 I   14.0 I    3.6
                    I    0.0 I    4.2 I    5.0 I   13.3 I    2.0 I
                    I    0.0 I    0.8 I    0.4 I    1.9 I    0.5 I
                   -I-------I-------I-------I-------I-------I
                 3. I     23 I     17 I      5 I      3 I      2 I     50
    BETWEEN 240-279 I   46.0 I   34.0 I   10.0 I    6.0 I    4.0 I    4.2
                    I    5.8 I    7.9 I    5.0 I    1.7 I    0.7 I
                    I    1.9 I    1.4 I    0.4 I    0.3 I    0.2 I
                   -I-------I-------I-------I-------I-------I
                 4. I      0 I      2 I      0 I      0 I      0 I      2
    BETWEEN 280-289 I    0.0 I  100.0 I    0.0 I    0.0 I    0.0 I    0.2
                    I    0.0 I    0.9 I    0.0 I    0.0 I    0.0 I
                    I    0.0 I    0.2 I    0.0 I    0.0 I    0.0 I
                   -I-------I-------I-------I-------I-------I
                 5. I      7 I      6 I      1 I      0 I      2 I     16
    BETWEEN 290-315 I   43.8 I   37.5 I    6.3 I    0.0 I   12.5 I    1.3
                    I    1.8 I    2.8 I    1.0 I    0.0 I    0.7 I
                    I    0.6 I    0.5 I    0.1 I    0.0 I    0.2 I
                   -I-------I-------I-------I-------I-------I
                 6. I     19 I      9 I      1 I      1 I     77 I    107
    BETWEEN 320-389 I   17.8 I    8.4 I    0.9 I    0.9 I   72.0 I    9.0
                    I    4.8 I    4.2 I    1.0 I    0.6 I   25.3 I
                    I    1.6 I    0.8 I    0.1 I    0.1 I    6.5 I
                   -I-------I-------I-------I-------I-------I
                 7. I     52 I     46 I     14 I      7 I      3 I    122
    BETWEEN 390-458 I   42.6 I   37.7 I   11.5 I    5.7 I    2.5 I   10.3
                    I   13.2 I   21.4 I   14.0 I    4.0 I    1.0 I
                    I    4.4 I    3.9 I    1.2 I    0.6 I    0.3 I
                   -I-------I-------I-------I-------I-------I
                 8. I     69 I     32 I     18 I      7 I     16 I    142
    BETWEEN 460-519 I   48.6 I   22.5 I   12.7 I    4.9 I   11.3 I   12.0
                    I   17.5 I   14.9 I   18.0 I    4.0 I    5.3 I
                    I    5.8 I    2.7 I    1.5 I    0.6 I    1.3 I
                   -I-------I-------I-------I-------I-------I
                 9. I     10 I     18 I      5 I     20 I      2 I     55
    BETWEEN 520-577 I   18.2 I   32.7 I    9.1 I   36.4 I    3.6 I    4.6
                    I    2.5 I    8.4 I    5.0 I   11.6 I    0.7 I
                    I    0.8 I    1.5 I    0.4 I    1.7 I    0.2 I
                   -I-------I-------I-------I-------I-------I
                10. I      7 I      2 I      1 I      3 I     18 I     31
    BETWEEN 580-599 I   22.6 I    6.5 I    3.2 I    9.7 I   58.1 I    2.6
                    I    1.8 I    0.9 I    1.0 I    1.7 I    5.9 I
                    I    0.6 I    0.2 I    0.1 I    0.3 I    1.5 I
                   -I-------I-------I-------I-------I-------I
                11. I      3 I      1 I      0 I      2 I     11 I     17
    BETWEEN 600-607 I   17.6 I    5.9 I    0.0 I   11.8 I   64.7 I    1.4
                    I    0.8 I    0.5 I    0.0 I    1.2 I    3.6 I
                    I    0.3 I    0.1 I    0.0 I    0.2 I    0.9 I
                   -I-------I-------I-------I-------I-------I
                12. I     13 I      2 I      1 I      9 I      4 I     29
    BETWEEN 610-629 I   44.8 I    6.9 I    3.4 I   31.0 I   13.8 I    2.4
                    I    3.3 I    0.9 I    1.0 I    5.2 I    1.3 I
                    I    1.1 I    0.2 I    0.1 I    0.8 I    0.3 I
                   -I-------I-------I-------I-------I-------I
                14. I     22 I      5 I     28 I     12 I      4 I     71
    BETWEEN 680-709 I   31.0 I    7.0 I   39.4 I   16.9 I    5.6 I    6.0
                    I    5.6 I    2.3 I   28.0 I    6.9 I    1.3 I
                    I    1.9 I    0.4 I    2.4 I    1.0 I    0.3 I
                   -I-------I-------I-------I-------I-------I
                15. I     30 I     22 I      2 I      5 I     37 I     96
    BETWEEN 710-738 I   31.3 I   22.9 I    2.1 I    5.2 I   38.5 I    8.1
                    I    7.6 I   10.2 I    2.0 I    2.9 I   12.2 I
                    I    2.5 I    1.9 I    0.2 I    0.4 I    3.1 I
                   -I-------I-------I-------I-------I-------I
                16. I      3 I      1 I      0 I      1 I      2 I      7
    BETWEEN 740-759 I   42.9 I   14.3 I    0.0 I   14.3 I   28.6 I    0.6
                    I    0.8 I    0.5 I    0.0 I    0.6 I    0.7 I
                    I    0.3 I    0.1 I    0.0 I    0.1 I    0.2 I
                   -I-------I-------I-------I-------I-------I
                18. I     18 I     13 I      6 I      4 I     12 I     53
    BETWEEN 780-796 I   34.0 I   24.5 I   11.3 I    7.5 I   22.6 I    4.5
                    I    4.6 I    6.0 I    6.0 I    2.3 I    3.9 I
                    I    1.5 I    1.1 I    0.5 I    0.3 I    1.0 I
                   -I-------I-------I-------I-------I-------I
                19. I     44 I      9 I      2 I     15 I     45 I    115
    BETWEEN 800-999 I   38.3 I    7.8 I    1.7 I   13.0 I   39.1 I    9.7
                    I   11.1 I    4.2 I    2.0 I    8.7 I   14.8 I
                    I    3.7 I    0.8 I    0.2 I    1.3 I    3.8 I
                   -I-------I-------I-------I-------I-------I
                20. I     57 I     19 I      4 I     54 I     59 I    193
    WELLEXAM        I   29.5 I    9.8 I    2.1 I   28.0 I   30.6 I   16.3
                    I   14.4 I    8.8 I    4.0 I   31.2 I   19.4 I
                    I    4.8 I    1.6 I    0.3 I    4.5 I    5.0 I
                   -I-------I-------I-------I-------I-------I
                21. I     17 I      2 I      5 I      6 I      3 I     33
    OTHER           I   51.5 I    6.1 I   15.2 I   18.2 I    9.1 I    2.8
                    I    4.3 I    0.9 I    5.0 I    3.5 I    1.0 I
                    I    1.4 I    0.2 I    0.4 I    0.5 I    0.3 I
                   -I-------I-------I-------I-------I-------I
             COLUMN      395      215      100      173      304     1187
              TOTAL     33.3     18.1      8.4     14.6     25.6    100.0
```

Chi Square = 606.14893 with 72 degrees of freedom.
Significance = 0.0000

NAMCS VARIABLE DEFINITIONS

(Variables included in length of stay regression analysis.)

VARIABLE TYPE	NAME	DEFINITION
Patient characteristics:	AGE	patient age
	SEX	patient sex (0=male, 1=female)
	RACE	patient race (0=other, 1=white)
Patient status:	NEWPATB	new patient
	OLDPATPB	old patient
Reason for Visit:	ACUTEPRB	acute problem
	ACUTERET	acute problen, follow-up
	CHRNROUT	chronic problem, routine
	CHRNSUDN	chronic problem, flare-up
	WELLEXAM	well exam
Services:	NOSERVIC	no service ordered or provided
	LIMTDHST	limited history/exam
	GENRLHST	general history/exam
	CLINTEST	clinical laboratory test
	BLOODPRS	blood pressure check
	OFFCSURG	office surgery
	DRUGRX	drug prescribed or dispensed
	MDCOUNSL	medical counseling
Disposition of visit:	NOFOLLUP	no follow-up planned
	RETPLAND	return at specified time
	RETIFNEC	return if needed
	REFERDSP	referral
	REFRBACK	return to referring physician
Symptoms:	LOWPAIN	NAMCS code 400 (pain etc. lower extremity)
	BACKPAIN	NAMCS code 415 (pain etc. back region)
	SORETHRT	NAMCS code 520 (sore throat)
	UPPRPAIN	NAMCS code 405 (pain etc. upper extremity)
	ABDOPAIN	NAMCS code 540 (abdominal pain)
	FATIGUE	NAMCS code 004 (fatigue)
	HEADACHE	NAMCS code 056 (headache)
	CHSTPAIN	NAMCS code 322 (pain in chest)
	FACEPAIN	NAMCS code 410 (pain etc. face and neck)
	FEVER	NAMCS code 002 (fever)
	VERTIGO	NAMCS code 069 (vertigo)
	SWELLING	NAMCS code 115 (swelling, mass of skin)
	BREATHLS	NAMCS code 306 (shortness of breath)

VARIABLE TYPE	NAME	DEFINITION
Type of practice:		
	SOLO	solo practice
	PARTNER	partnership
	GROUP	group practice
Diagnostic categories:		
	DIAG00	infective and parasitic diseases (A)
	DIAG01	infective and parasitic diseases (B)
	DIAG02	neoplasms
	DIAG03	endocrine,nutritional & metabolic diseases
	DIAG04	diseases of the blood
	DIAG05	mental disorders
	DIAG06	nervous system & sense organ diseases
	DIAG07	diseases of the circulatory system
	DIAG08	diseases of the respiratory system
	DIAG09	diseases of the digestive system
	DIAG10	diseases of the urinary system
	DIAG11	diseases of male genital organs
	DIAG12	diseases of female genital organs
	DIAG13	complications of childbirth, pregnancy etc.
	DIAG14	diseases of the skin & subcutaneous tissue
	DIAG15	diseases of musculoskeletal system
	DIAG16	congenital anomalies
	DIAG17	perinatal morbidity and mortality
	DIAG18	symptoms and ill-defined conditions
	DIAG19	accidents, poisonings and violence
	DIAG20	conditions & examinations without sickness

TABLE 5

REGRESSION ANALYSIS
LOG OF PATIENT VISIT LENGTH AS A FUNCTION OF PATIENT BACKGROUND AND SYMPTOMS
(Family Practitioners)

```
MULTIPLE R             0.32136
R SQUARE               0.10327
ADJUSTED R SQUARE      0.03992
STANDARD ERROR         0.75513

----------------- VARIABLES IN THE EQUATION ------------------

VARIABLE          B              BETA       STD ERROR B       F

AGE          0.4164337D-02     0.12425      0.00186         5.000
SEX          0.2545621D-01     0.01635      0.08009         0.101
RACE        -0.2159459D-01    -0.00837      0.13051         0.027
ACUTEPRB    -0.1700189D-01    -0.01073      0.13015         0.017
ACUTERET    -0.1287275        -0.06201      0.15588         0.682
CHRNROUT    -0.1449603D-01    -0.00811      0.14206         0.010
CHRNSUDN     0.2367245         0.09175      0.16483         2.063
WELLEXAM     0.1689268         0.05724      0.17021         0.985
NEWPATPB     0.1062634         0.04591      0.13440         0.625

OLDPATPB    -0.2314326        -0.14803      0.11904         3.780
SOLO         0.1201154         0.07289      0.15983         0.565
PARTNER      0.8589977D-01     0.04033      0.18064         0.226
GROUP       -0.1678338        -0.06578      0.19633         0.731
LOWPAIN      0.3310527         0.07953      0.21511         2.369
BACKPAIN     0.3646361         0.10865      0.17190         4.500
SORETHRT     0.8864144D-01     0.01977      0.23000         0.149
UPPRPAIN     0.9666545D-01     0.02155      0.22736         0.181
ABDOPAIN     0.1111485         0.01905      0.29396         0.143
FATIGUE      0.1284371         0.02041      0.31402         0.167
HEADACHE     0.1021421         0.01980      0.26104         0.153
CHSTPAIN     0.3889616         0.05060      0.38853         1.002
FACEPAIN     0.1569942         0.02495      0.31847         0.243
FEVER        0.2642416         0.04836      0.27905         0.897
VERTIGO      0.3612994         0.06193      0.29980         1.452
SWELLING    -0.9711928D-01    -0.01095      0.44516         0.048
BREATHLS     0.5572097         0.08854      0.31721         3.086
(CONSTANT)   2.077954
```

TABLE 6

REGRESSION ANALYSIS
LOG OF PATIENT VISIT LENGTH AS A FUNCTION OF PATIENT BACKGROUND AND SYMPTOMS
AND
DIAGNOSTIC (ICDA) CATEGORIES
(Family Practitioners)

MULTIPLE R	0.38148
R SQUARE	0.14553
ADJUSTED R SQUARE	0.04357
STANDARD ERROR	0.75369

---------------- VARIABLES IN THE EQUATION ------------------

VARIABLE	B	BETA	STD ERROR B	F
AGE	0.3426480D-02	0.10223	0.00205	2.800
SEX	-0.1738088D-03	-0.00011	0.08273	0.000
RACE	0.1307972D-01	0.00507	0.13521	0.009
ACUTEPRB	-0.3891938D-01	-0.02457	0.15894	0.060
ACUTERET	-0.2116236	-0.10194	0.17287	1.499
CHRNROUT	-0.7521156D-01	-0.04206	0.16362	0.211
CHRNSUDN	0.1247019	0.04833	0.18055	0.477
WELLEXAM	0.9994655D-01	0.03387	0.17275	0.335
NEWPATPB	0.1005434	0.04343	0.13596	0.547
OLDPATPB	-0.2148064	-0.13739	0.12155	3.123
DIAG20	-0.8739732D-01	-0.03990	0.19068	0.210
SOLO	0.1424819	0.08646	0.16192	0.774
PARTNER	0.1027609	0.04824	0.18421	0.311
GROUP	-0.1904453	-0.07464	0.20028	0.904
LOWPAIN	0.3740448	0.08985	0.23016	2.641
BACKPAIN	0.2697203	0.08036	0.23070	1.367
SORETHRT	0.1840118	0.04103	0.23834	0.596
UPPRPAIN	0.3716142D-01	0.00829	0.25980	0.020
ABDOPAIN	0.1143659	0.01960	0.31828	0.129
FATIGUE	0.3031474D-01	0.00482	0.32155	0.009
HEADACHE	-0.3538234D-01	-0.00686	0.26810	0.017
CHSTPAIN	0.4815183	0.06263	0.39538	1.483
FACEPAIN	0.8030189D-01	0.01276	0.37026	0.047
FEVER	0.2946133	0.05392	0.28538	1.066
VERTIGO	0.3176984	0.05446	0.30443	1.089
SWELLING	-0.1146199D-01	-0.00129	0.46046	0.001
BREATHLS	0.6707040	0.10658	0.32509	4.257
DIAG00	-0.5579530D-01	-0.01471	0.23675	0.056
DIAG01	0.2576105	0.01682	0.77232	0.111
DIAG03	0.1037772	0.03157	0.22144	0.220
DIAG05	0.4795551	0.08220	0.33001	2.112
DIAG06	0.5554339D-01	0.01544	0.22741	0.060
DIAG07	-0.1812297D-01	-0.00796	0.19542	0.009
DIAG08	-0.1433859	-0.07073	0.17755	0.652
DIAG09	0.1897106	0.03572	0.29111	0.425
DIAG10	-0.8616942D-02	-0.00148	0.33818	0.001
DIAG11	0.4013865	0.04527	0.46512	0.745
DIAG12	0.2231539	0.05172	0.25598	0.760
DIAG14	-0.1632937	-0.04865	0.21460	0.579
DIAG15	0.1232433	0.04242	0.21665	0.324
DIAG16	0.5728699	0.06462	0.47084	1.480
DIAG18	0.4913228	0.13312	0.22797	4.645
(CONSTANT)	2.108635			

TABLE 7

REGRESSION ANALYSIS LOG OF PATIENT VISIT LENGTH AS A FUNCTION OF PATIENT BACKGROUND AND SYMPTOMS AND DIAGNOSTIC (ICDA) CATEGORIES AND SERVICES PERFORMED (Family Practitioners)

MULTIPLE R	0.46474
R SQUARE	0.21598
ADJUSTED R SQUARE	0.10202
STANDARD ERROR	0.73030

----------------- VARIABLES IN THE EQUATION -----------------

VARIABLE	B	BETA	STD ERROR B	F
AGE	0.3240320D-02	0.09668	0.00205	2.506
SEX	-0.3576347D-01	-0.02297	0.08125	0.194
RACE	0.1055358	0.04090	0.13308	0.629
ACUTEPRB	-0.1040477	-0.06569	0.16078	0.419
ACUTERET	-0.1901086	-0.09158	0.16993	1.252
CHRNROUT	-0.1075571	-0.06015	0.16188	0.441
CHRNSUDN	0.1061840	0.04115	0.17772	0.357
WELLEXAM	0.2090671D-02	0.00071	0.17070	0.000
NOSERVIC	0.6547572D-01	0.01198	0.28492	0.053
LIMTDHST	0.9074097D-01	0.05824	0.09035	1.009
GENRLHST	0.3129900	0.13044	0.14130	4.907
CLINTEST	0.3466817	0.18589	0.10616	10.664
BLOODPRS	0.4690041D-01	0.03013	0.09381	0.250
OFFCSURG	0.1594001	0.04319	0.19071	0.699
DRUGRX	0.2191001	0.14213	0.08903	6.057
MDCOUNSL	0.1892290	0.08033	0.11908	2.525
NEWPATPB	0.9139360D-01	0.03948	0.13330	0.470
OLDPATPB	-0.2127946	-0.13611	0.11898	3.199
DIAG20	-0.1418070	-0.06474	0.18805	0.569
SOLO	0.1375145	0.08345	0.15887	0.749
PARTNER	0.1024803	0.04811	0.18020	0.323
GROUP	-0.2219453	-0.08699	0.19575	1.286
LOWPAIN	0.4289918	0.10305	0.22550	3.609
BACKPAIN	0.3492912	0.10407	0.22506	2.409
SORETHRT	0.2016670	0.04497	0.23279	0.750
UPPRPAIN	0.1115359	0.02487	0.25424	0.192
ABDOPAIN	-0.9930170D-02	-0.00170	0.31157	0.001
FATIGUE	-0.6207637D-01	-0.00986	0.31925	0.038
HEADACHE	0.1437025D-01	0.00279	0.26313	0.003
CHSTPAIN	0.6639387	0.08636	0.38856	2.920
FACEPAIN	0.2440506	0.03878	0.36054	0.458
FEVER	0.2714279	0.04968	0.27872	0.948
VERTIGO	0.2829623	0.04850	0.29853	0.898
SWELLING	0.1467604	0.01655	0.45488	0.104
BREATHLS	0.6357867	0.10103	0.32059	3.933
DIAG00	-0.9940443D-01	-0.02621	0.23164	0.184
DIAG01	0.2367339	0.01546	0.75210	0.099
DIAG03	-0.1241797	-0.03778	0.22634	0.301
DIAG05	0.4331182	0.07424	0.32453	1.781
DIAG06	0.1470871D-01	0.00409	0.22315	0.004
DIAG07	-0.1152083	-0.05061	0.19376	0.354
DIAG08	-0.2248467	-0.11092	0.17886	1.580
DIAG09	0.1448852	0.02957	0.28574	0.257
DIAG10	-0.2421269	-0.04150	0.33530	0.521
DIAG11	0.3378508	0.03811	0.45727	0.546
DIAG12	-0.3791632D-01	-0.00879	0.25420	0.022
DIAG14	-0.1826340	-0.05442	0.21071	0.751
DIAG15	0.6468963D-01	0.02227	0.21581	0.090
DIAG16	0.6705947	0.07564	0.46042	2.121
DIAG18	0.2987725	0.08095	0.22711	1.731
(CONSTANT)	1.837367			

TABLE 8

REGRESSION ANALYSIS
LOG OF PATIENT VISIT LENGTH AS A FUNCTION OF PATIENT BACKGROUND AND SYMPTOMS, DIAGNOSTIC (ICDA) CATEGORIES AND SERVICES PERFORMED AND CASE DISPOSITION
(Family Practitioners)

```
MULTIPLE R            0.49797
R SQUARE              0.24798
ADJUSTED R SQUARE     0.12597
STANDARD ERROR        0.72050


---------------- VARIABLES IN THE EQUATION -----------------

VARIABLE             B              BETA      STD ERROR B        F

AGE          0.3974893D-02      0.11859         0.00203        3.818
SEX         -0.5893044D-01     -0.03785         0.08100        0.529
RACE         0.9778728D-01      0.03790         0.13167        0.552
ACUTEFRB    -0.1132988         -0.07153         0.15985        0.502
ACUTERET    -0.2411810         -0.11618         0.16836        2.052
CHRNROUT    -0.1610281         -0.09005         0.16100        1.000
CHRNSUDN     0.1113070          0.04314         0.17700        0.395
WELLEXAM    -0.6621796D-02     -0.00224         0.16881        0.002
NOSERVIC     0.4275585D-02      0.00078         0.28285        0.000
LIMTDHST     0.8810168D-01      0.05655         0.08986        0.961
GENRLHST     0.2914016          0.12144         0.14096        4.273
CLINTEST     0.3527662          0.18915         0.10611       11.053
BLOODPRS     0.4016491D-01      0.02580         0.09302        0.186
OFFCSURG     0.1272727          0.03448         0.18989        0.449
DRUGRX       0.2418577          0.15689         0.09132        7.014
MDCOUNSL     0.1811969          0.07692         0.11865        2.332
NOFOLLUP    -0.1261249         -0.05758         0.20851        0.366
RETPLAND     0.7908819D-01      0.05135         0.19154        0.170
RETIFNEC    -0.2490940         -0.14425         0.19508        1.630
REFERDSP     0.2980049          0.07159         0.26397        1.274
REFRBACK    -0.1544183         -0.01008         0.75601        0.042
NEWPATFB     0.9511561D-01      0.04109         0.13255        0.515
OLDPATPB    -0.2100100         -0.13433         0.12223        2.952
DIAG20      -0.1797371         -0.08206         0.18643        0.929
SOLO         0.1352491          0.08207         0.15704        0.742
PARTNER      0.5898125D-01      0.02769         0.17905        0.109
GROUP       -0.1864929         -0.07310         0.19418        0.922
LOWPAIN      0.4027622          0.09675         0.22602        3.175
BACKPAIN     0.3200762          0.09537         0.22345        2.052
SORETHRT     0.1829563          0.04080         0.23096        0.627
UPPRPAIN     0.1066529          0.02378         0.25196        0.179
ABDOPAIN    -0.3469752D-01     -0.00595         0.30940        0.013
FATIGUE     -0.1427280         -0.02268         0.31737        0.202
HEADACHE    -0.2458404D-02     -0.00048         0.26005        0.000
CHSTPAIN     0.5724962          0.07447         0.38653        2.194
FACEPAIN     0.2004093          0.03185         0.35643        0.316
FEVER        0.3066586          0.05612         0.27615        1.233
VERTIGO      0.2408133          0.04128         0.29610        0.661
SWELLING     0.1563274          0.01763         0.45225        0.119
BREATHLS     0.5019715          0.07977         0.31942        2.470
DIAG00      -0.5138076D-01     -0.01355         0.23032        0.050
DIAG01       0.7303127D-01     -0.00477         0.74493        0.010
DIAG03      -0.2509596         -0.07635         0.22639        1.229
DIAG05       0.4021922          0.06894         0.32505        1.531
DIAG06       0.3200661D-01      0.00890         0.22174        0.021
DIAG07      -0.2207130         -0.09695         0.19513        1.279
DIAG08      -0.1723507         -0.08502         0.17776        0.940
DIAG09       0.1440188          0.02939         0.28439        0.256
DIAG10      -0.3757817         -0.06441         0.33320        1.272
DIAG11       0.2039766          0.02301         0.45473        0.201
DIAG12      -0.6454330D-01     -0.01496         0.25208        0.066
DIAG14      -0.2222513         -0.06622         0.20890        1.132
DIAG15      -0.2918257D-02     -0.00100         0.21393        0.000
DIAG16       0.5502310          0.06206         0.45804        1.443
DIAG18       0.2471827          0.06697         0.22527        1.204
(CONSTANT)   1.926666
```

TABLE 9

REGRESSION ANALYSIS
LOG OF PATIENT VISIT LENGTH AS A FUNCTION OF PATIENT BACKGROUND AND SYMPTOMS
(Internists and Internal Medicine Specialists)

```
MULTIPLE R            0.45217
R SQUARE              0.20446
ADJUSTED R SQUARE     0.13264
STANDARD ERROR        0.75349

---------------- VARIABLES IN THE EQUATION -----------------

VARIABLE          B              BETA      STD ERROR B       F

AGE          0.49518880D-02    0.12552      0.00223        4.931
SEX         -0.10219570D-01   -0.00625      0.08921        0.013
RACE         0.4598850         0.17892      0.14001       10.789
ACUTEPRB     0.86826840D-01    0.04840      0.17238        0.254
ACUTERET    -0.26176640D-01   -0.00992      0.20172        0.017
CHRNROUT     0.69446360D-01    0.04275      0.16690        0.173
CHRNSUDN     0.3877015         0.17101      0.17476        4.922
WELLEXAM     0.7061489         0.21317      0.21901       10.396
NEWPATFB     0.3602114         0.17511      0.15081        5.705

OLDPATPB     0.62127930D-01    0.03716      0.14584        0.181
SOLO        -0.4047597        -0.24916      0.15610        6.723
PARTNER     -0.1456932        -0.06591      0.18125        0.646
GROUP       -0.1602165        -0.07838      0.17618        0.827
LOWPAIN      0.7220349         0.13176      0.30742        5.516
BACKPAIN    -0.3540967        -0.04258      0.46087        0.590
SORETHRT    -0.80537000D-02   -0.00136      0.32784        0.001
UFFRPAIN    -0.1300718        -0.03082      0.23072        0.318
ABDOPAIN     0.1960310         0.04646      0.23336        0.706
FATIGUE      0.7020812         0.11881      0.32517        4.662
HEADACHE     0.4776107D-01     0.01176      0.22534        0.045
CHSTPAIN     0.3108775         0.09162      0.18754        2.748
FACEPAIN    -0.32418430D-01   -0.00319      0.56027        0.003
FEVER       -0.5351898        -0.08281      0.35919        2.220
VERTIGO      0.5211246         0.08063      0.34744        2.250
SWELLING    -0.3858638        -0.03794      0.54983        0.493
BREATHLS     0.28586650D-01    0.00650      0.24548        0.014
(CONSTANT)   2.035220
```

TABLE 10

REGRESSION ANALYSIS
LOG OF PATIENT VISIT LENGTH AS A FUNCTION OF PATIENT BACKGROUND AND SYMPTOMS
AND
DIAGNOSTIC (ICDA) CATEGORIES
(Internists and Internal Medicine Specialists)

```
MULTIPLE R            0.51956
R SQUARE              0.26994
ADJUSTED R SQUARE     0.15097
STANDARD ERROR        0.74549


---------------- VARIABLES IN THE EQUATION -----------------

VARIABLE              B              BETA     STD ERROR B        F

AGE          0.3811748D-02       0.09662        0.00246      2.399
SEX         -0.2852150D-01      -0.01746        0.09277      0.095
RACE         0.4664671           0.18148        0.14431     10.448
ACUTEFRB     0.1218747           0.06793        0.17573      0.481
ACUTERET     0.1628708D-01       0.00617        0.20497      0.006
CHRNROUT     0.9179935D-01       0.05651        0.16764      0.300
CHRNSUDN     0.3977001           0.17542        0.17583      5.116
WELLEXAM     0.8087116           0.24413        0.24061     11.297
NEWPATFB     0.3415197           0.16602        0.15297      4.985
OLDPATFB     0.1660399D-02       0.00099        0.14856      0.000
DIAG20      -0.6363213D-01      -0.02049        0.31749      0.040
SOLO        -0.3470308          -0.21363        0.16038      4.682
PARTNER     -0.8851158D-01      -0.04004        0.18455      0.230
GROUP       -0.1623916          -0.07944        0.17993      0.815
LOWPAIN      0.6151821           0.11226        0.32036      3.687
BACKPAIN    -0.3310259          -0.03980        0.48164      0.472
SORETHRT    -0.1217515          -0.02060        0.33713      0.130
UPPRPAIN    -0.7868195D-01      -0.01865        0.23895      0.108
ABDOPAIN    -0.5941230D-01      -0.01408        0.27799      0.046
FATIGUE      0.7067461           0.11960        0.34065      4.304
HEADACHE    -0.5043735D-01      -0.01242        0.23145      0.047
CHSTPAIN     0.2652487           0.07818        0.19169      1.915
FACEPAIN    -0.5887624D-02      -0.00058        0.57449      0.000
FEVER       -0.6511240          -0.10075        0.36059      3.261
VERTIGO      0.4988274           0.07718        0.35574      1.966
SWELLING     0.1197962           0.01178        0.56163      0.045
BREATHLS     0.2652854D-01       0.00603        0.24853      0.011
DIAG00       0.1702414           0.03107        0.39376      0.187
DIAG01       0.2258252           0.02221        0.59997      0.142
DIAG02      -0.2378214D-01      -0.00607        0.33030      0.005
DIAG03       0.1498246           0.04727        0.30534      0.241
DIAG04       0.2017102           0.01983        0.61553      0.107
DIAG05       0.5605214           0.10229        0.39154      2.049
DIAG06       0.1813569           0.03936        0.35561      0.260
DIAG07       0.2000998           0.09727        0.27939      0.513
DIAG08       0.1490103           0.06741        0.28167      0.280
DIAG09       0.4494525           0.14476        0.31635      2.019
DIAG10       0.5022294           0.06039        0.50310      0.997
DIAG11        1.005514           0.07003        0.81624      1.518
DIAG12       0.4167795           0.05011        0.50393      0.684
DIAG14      -0.3454616          -0.13097        0.28465      1.473
DIAG15       0.1918790           0.06302        0.28551      0.452
DIAG16        1.271200           0.08853        0.80044      2.522
DIAG18       0.9252328D-01       0.02727        0.30827      0.090
(CONSTANT)    1.958771
```

TABLE 11

REGRESSION ANALYSIS LOG OF PATIENT VISIT LENGTH AS A FUNCTION OF PATIENT BACKGROUND AND SYMPTOMS AND DIAGNOSTIC (ICDA) CATEGORIES AND SERVICES PERFORMED (Internists and Internal Medicine Specialists)

MULTIPLE R	0.64634
R SQUARE	0.41776
ADJUSTED R SQUARE	0.30220
STANDARD ERROR	0.67584

------------------ VARIABLES IN THE EQUATION ------------------

VARIABLE	B	BETA	STD ERROR B	F
AGE	0.1908929D-02	0.04839	0.00229	0.695
SEX	0.8952226D-01	0.05479	0.08602	1.083
RACE	0.5467576	0.21272	0.13204	17.148
ACUTEFRB	0.1342113	0.07481	0.16379	0.671
ACUTERET	0.5766878D-01	0.02186	0.18919	0.093
CHRNROUT	0.6458057D-01	0.03975	0.15468	0.174
CHRNSUDN	0.2680705	0.11824	0.16679	2.583
WELLEXAM	0.4175645	0.12605	0.23237	3.229
NOSERVIC	-0.1437561	-0.02623	0.29816	0.232
LIMTDHST	0.1793978	0.10991	0.11786	2.317
GENRLHST	0.7594787	0.40045	0.14615	27.006
CLINTEST	0.5809377D-01	0.03310	0.10265	0.320
BLOODPRS	0.1506250	0.09321	0.09919	2.306
OFFCSURG	0.4973916D-01	0.01225	0.23838	0.044
DRUGRX	-0.2177190D-01	-0.01343	0.08745	0.062
MDCOUNSL	0.2766034	0.14379	0.10134	7.450
NEWPATFB	0.3273296	0.15912	0.14121	5.374
OLDPATFB	0.1494784	0.08941	0.13856	1.164
DIAG20	0.2619862D-01	0.00844	0.29671	0.008
SOLO	-0.2892562	-0.17806	0.14750	3.846
PARTNER	-0.8569261D-01	-0.03877	0.16856	0.258
GROUP	-0.1024037	-0.05010	0.16453	0.387
LOWPAIN	0.4630064	0.08449	0.29212	2.512
BACKPAIN	-0.4993687D-02	-0.00060	0.44645	0.000
SORETHRT	-0.1483504	-0.02510	0.31306	0.225
UPPRPAIN	-0.1339976	-0.03175	0.21854	0.376
ABDOPAIN	-0.1504235D-01	-0.00356	0.25568	0.003
FATIGUE	0.5328213	0.09017	0.31260	2.905
HEADACHE	-0.4703152D-01	-0.01158	0.21146	0.049
CHSTPAIN	0.3171641	0.09348	0.17955	3.120
FACEPAIN	0.3046492	0.02996	0.52534	0.336
FEVER	-0.6854370	-0.10606	0.32946	4.328
VERTIGO	0.3695617	0.05718	0.32460	1.296
SWELLING	-0.9787025D-01	-0.00962	0.56908	0.030
BREATHLS	0.8996830D-01	0.02045	0.22882	0.155
DIAG00	0.9090193D-01	0.01659	0.35952	0.064
DIAG01	0.3118183	0.03066	0.55076	0.321
DIAG02	-0.7184512D-01	-0.01833	0.30218	0.057
DIAG03	0.1471187	0.04642	0.28784	0.261
DIAG04	-0.3276429D-02	-0.00032	0.57674	0.000
DIAG05	0.5452376	0.09950	0.36274	2.259
DIAG06	0.1673787	0.03633	0.32990	0.257
DIAG07	0.2130014	0.10355	0.26260	0.658
DIAG08	0.1951932	0.08966	0.26157	0.574
DIAG09	0.4979108	0.16036	0.29251	2.897
DIAG10	0.1110491	0.01335	0.46534	0.057
DIAG11	1.171238	0.08157	0.75093	2.433
DIAG12	0.3639701	0.04376	0.46620	0.610
DIAG14	-0.1074335	-0.04073	0.26846	0.160
DIAG15	0.1846994	0.06066	0.27259	0.459
DIAG16	0.7969608	0.05550	0.74070	1.158
DIAG18	0.1363519	0.04019	0.28868	0.223
(CONSTANT)	1.365993			

TABLE 12

REGRESSION ANALYSIS
LOG OF PATIENT VISIT LENGTH AS A FUNCTION OF PATIENT BACKGROUND AND SYMPTOMS, DIAGNOSTIC (ICDA) CATEGORIES AND SERVICES PERFORMED AND CASE DISPOSITION
(Internists and Internal Medicine Specialists)

MULTIPLE R	0.65888
R SQUARE	0.43413
ADJUSTED R SQUARE	0.30862
STANDARD ERROR	0.67272

------------------ VARIABLES IN THE EQUATION ------------------

VARIABLE	B	BETA	STD ERROR B	F
AGE	0.2261805D-02	0.05733	0.00231	0.956
SEX	0.9203794D-01	0.05633	0.08667	1.128
RACE	0.5484585	0.21338	0.13265	17.096
ACUTEPRB	0.1118064	0.05232	0.16328	0.469
ACUTERET	0.3632847D-01	0.01377	0.19018	0.036
CHRNRCUT	0.4354867D-01	0.02681	0.15774	0.076
CHRNSUDN	0.2719158	0.11994	0.16778	2.627
WELLEXAM	0.4403688	0.13294	0.23355	3.555
NOSERVIC	-0.1704434	-0.03110	0.29714	0.329
LIMTDHST	0.1919802	0.11761	0.11757	2.666
GENRLHST	0.7579684	0.39966	0.14608	26.922
CLINTEST	0.6082441D-01	0.03466	0.10337	0.346
BLOODPRS	0.1564498	0.09682	0.09984	2.455
OFFCSURG	0.7843826D-01	0.01932	0.23826	0.108
DRUGRX	-0.3170935D-01	-0.01936	0.08571	0.128
MDCOUNSL	0.2968563	0.15432	0.10159	8.539
NOFOLLUP	0.5186877D-01	0.01885	0.20024	0.067
RETPLAND	0.9451204D-01	0.05554	0.15253	0.384
RETIFNEC	-0.1043679	-0.05008	0.16957	0.379
REFERDSP	-0.4645350	-0.11009	0.22118	4.411
REFRBACK	0.9790026D-01	0.01515	0.34303	0.081
NEWPATPB	0.2696753	0.13110	0.14425	3.495
OLDPATPB	0.4853460D-01	0.02903	0.14482	0.112
DIAG20	0.1355557D-01	0.00437	0.29901	0.002
SOLO	-0.3619220	-0.22279	0.14967	5.847
PARTNER	-0.1511688	-0.06839	0.17085	0.783
GROUP	-0.1496211	-0.07319	0.16548	0.817
LOWPAIN	0.5003517	0.09131	0.29215	2.933
BACKPAIN	0.3606694D-01	0.00434	0.45037	0.006
SORETHRT	-0.1832437	-0.03101	0.31368	0.341
UPPRPAIN	-0.8864943D-01	-0.02101	0.21890	0.164
ABDOPAIN	-0.4390655D-01	-0.01041	0.26015	0.028
FATIGUE	0.6170951	0.10443	0.31550	3.826
HEADACHE	-0.2224992D-01	-0.00548	0.21421	0.011
CHSTPAIN	0.3454322	0.10181	0.18369	3.537
FACEPAIN	0.1314128	0.01292	0.53123	0.061
FEVER	-0.6934268	-0.10729	0.32854	4.455
VERTIGO	0.3662752	0.05667	0.32768	1.249
SWELLING	-0.2453598	-0.02413	0.57055	0.185
BREATHLS	0.5886707D-01	0.01338	0.23006	0.065
DIAG00	0.9573780D-01	0.01747	0.35929	0.071
DIAG01	0.4065019	0.03997	0.55077	0.545
DIAG02	-0.5242450D-01	-0.01337	0.30451	0.030
DIAG03	0.1475411	0.04655	0.28821	0.262
DIAG04	-0.9463109D-01	-0.00931	0.57717	0.027
DIAG05	0.6995150	0.12765	0.36931	3.588
DIAG06	0.1326957	0.02880	0.33121	0.161
DIAG07	0.2097728	0.10198	0.26384	0.632
DIAG08	0.2330969	0.10545	0.26220	0.790
DIAG09	0.5634016	0.18146	0.29272	3.705
DIAG10	0.1498607	0.01802	0.46373	0.104
DIAG11	1.147677	0.07993	0.75016	2.341
DIAG12	0.3977337	0.04782	0.46843	0.721
DIAG14	-0.7181255D-01	-0.02723	0.26906	0.071
DIAG15	0.2180554	0.07162	0.27431	0.632
DIAG16	0.9007560	0.06273	0.75309	1.431
DIAG18	0.1421025	0.04168	0.28792	0.244
(CONSTANT)	1.430803			

TABLE 13

REGRESSION ANALYSIS
LOG OF PATIENT VISIT LENGTH AS A FUNCTION OF PATIENT BACKGROUND AND SYMPTOMS
(All Surgeons Grouped)

```
MULTIPLE R            0.34675
R SQUARE              0.12024
ADJUSTED R SQUARE     0.06941
STANDARD ERROR        0.69479


----------------- VARIABLES IN THE EQUATION ------------------

VARIABLE          B              BETA     STD ERROR B         F

AGE          0.2535853D-02    0.07108         0.00164       2.378
SEX         -0.8637390D-02   -0.00600         0.06560       0.017
RACE         0.6705074D-01    0.02777         0.11111       0.364
ACUTEFRB     0.6899724D-01    0.05337         0.10004       0.791
ACUTERET     0.3510369D-01    0.01832         0.10306       0.116
CHRNROUT     0.1283427        0.07288         0.09162       1.962
CHRNSUDN     0.6739190D-01    0.02944         0.12115       0.309
WELLEXAM     0.2860455        0.08156         0.16740       2.920
NEWPATFB     0.1364025        0.08157         0.12735       1.147

OLDPATPB    -0.2176823       -0.14307         0.12564       3.002
SOLO         0.2983599        0.20721         0.10092       8.740
PARTNER      0.3240930        0.17158         0.11929       7.382
GROUP        0.8621502D-01    0.04564         0.11869       0.528
LOWPAIN      0.5296827D-01    0.01759         0.13831       0.147
BACKPAIN     0.3005298        0.07744         0.17728       2.874
SORETHRT    -0.7486394       -0.11596         0.29435       6.469
UPPRPAIN     0.1300652        0.04456         0.13630       0.911
ABDOPAIN     0.6386312D-01    0.01390         0.20849       0.094
FATIGUE      0.1231869        0.01354         0.41441       0.088
HEADACHE     0.2247726        0.02019         0.50477       0.198
CHSTPAIN    -0.2892324       -0.02598         0.50106       0.333
FACEPAIN     0.9083301D-01    0.02131         0.19245       0.223
FEVER        0.6009773        0.05397         0.50836       1.398
VERTIGO      0.3969158        0.03565         0.50295       0.623
SWELLING     0.8311381D-01    0.01950         0.19855       0.175
BREATHLS     0.8223813        0.05228         0.70048       1.378
(CONSTANT)   2.123304
```

TABLE 14

REGRESSION ANALYSIS
LOG OF PATIENT VISIT LENGTH AS A FUNCTION OF PATIENT BACKGROUND AND SYMPTOMS
AND
DIAGNOSTIC (ICDA) CATEGORIES
(All Surgeons Grouped)

```
MULTIPLE R           0.38122
R SQUARE             0.14533
ADJUSTED R SQUARE    0.06045
STANDARD ERROR       0.69813


----------------- VARIABLES IN THE EQUATION -----------------

VARIABLE            B              BETA       STD ERROR B        F

AGE          0.3055230D-02       0.08564       0.00170         3.237
SEX         -0.1055663D-01      -0.00734       0.06840         0.024
RACE         0.5778732D-01       0.02394       0.11253         0.264
ACUTEPRB     0.7914545D-01       0.04747       0.10594         0.558
ACUTERET    -0.1307409D-01      -0.00682       0.10759         0.015
CHRNROUT     0.9565800D-01       0.05432       0.09794         0.954
CHRNSUDN     0.4120801D-01       0.01800       0.13119         0.099
WELLEXAM     0.2388177           0.06810       0.17135         1.943
NEWPATPB     0.1164097           0.06961       0.13079         0.792
OLDPATPB    -0.1971062          -0.12954       0.12919         2.328
DIAG20       0.3850086D-02       0.00228       0.13588         0.001
SOLO         0.3161806           0.21959       0.10375         9.287
PARTNER      0.3308009           0.17513       0.12196         7.357
GROUP        0.9928398D-01       0.05256       0.12252         0.657
LOWPAIN      0.1234637           0.04101       0.15708         0.618
BACKPAIN     0.3697060           0.09526       0.19272         3.680
SORETHRT    -0.7212928          -0.11173       0.34367         4.405
UPPRPAIN     0.2126579           0.07286       0.15508         1.880
ABDOPAIN     0.1017022           0.02214       0.23251         0.191
FATIGUE      0.3848603D-01       0.00423       0.42547         0.008
HEADACHE     0.5162209D-01       0.00464       0.59127         0.008
CHSTPAIN    -0.2263979          -0.02033       0.52710         0.184
FACEPAIN     0.1607238           0.03770       0.20305         0.627
FEVER        0.5512115           0.04950       0.53140         1.076
VERTIGO      0.3977734           0.03572       0.51177         0.604
SWELLING     0.1423085           0.03338       0.22260         0.409
BREATHLS     0.8323661           0.05292       0.73136         1.295
DIAG00       0.2486972           0.04703       0.25995         0.915
DIAG01      -0.4814535D-01      -0.00432       0.51865         0.009
DIAG02       0.4448533D-01       0.01477       0.18040         0.061
DIAG03      -0.2221420          -0.03144       0.33929         0.429
DIAG05       0.4769639           0.04284       0.59164         0.650
DIAG06       0.1522515           0.07826       0.14214         1.147
DIAG07       0.4990429D-02       0.00099       0.25927         0.000
DIAG08       0.2933808D-01       0.00874       0.21626         0.018
DIAG09      -0.3765838D-01      -0.01098       0.20473         0.034
DIAG10       0.9935622D-01       0.02833       0.20021         0.246
DIAG11      -0.2849464D-01      -0.00645       0.23113         0.015
DIAG12       0.1239952           0.02806       0.23130         0.287
DIAG14      -0.1151264          -0.02881       0.21523         0.286
DIAG15      -0.5774159D-01      -0.02274       0.14588         0.157
DIAG16       0.5191096           0.05704       0.42828         1.469
DIAG18       0.4589153           0.11484       0.20960         4.794
(CONSTANT)   2.046379
```

TABLE 15

REGRESSION ANALYSIS
LOG OF PATIENT VISIT LENGTH AS A FUNCTION OF PATIENT BACKGROUND AND SYMPTOMS AND DIAGNOSTIC (ICDA) CATEGORIES AND SERVICES PERFORMED
(All Surgeons Grouped)

MULTIPLE R	0.46465
R SQUARE	0.21590
ADJUSTED R SQUARE	0.12180
STANDARD ERROR	0.67495

------------------ VARIABLES IN THE EQUATION ------------------

VARIABLE	B	BETA	STD ERROR B	F
AGE	0.3458008D-02	0.09693	0.00167	4.286
SEX	-0.8795756D-02	-0.00611	0.06666	0.017
RACE	0.3238000D-01	0.01341	0.11064	0.086
ACUTEPRB	0.9306932D-01	0.05582	0.10747	0.750
ACUTERET	0.3175776D-01	0.01657	0.10569	0.090
CHRNROUT	0.9796749D-01	0.05563	0.09645	1.032
CHRNSUDN	0.7095154D-01	0.03099	0.12895	0.303
WELLEXAM	0.1240166	0.03536	0.16959	0.535
NOSERVIC	0.5969224D-01	0.01849	0.15861	0.142
LIMTDHST	-0.2251329	-0.15630	0.07869	8.185
GENRLHST	0.1676362	0.08045	0.11841	2.004
CLINTEST	0.5800459D-01	0.02513	0.13116	0.196
BLOODPRS	0.3773965	0.15179	0.12559	9.031
OFFCSURG	-0.8962420D-01	-0.04408	0.10146	0.780
DRUGRX	-0.1927746	-0.10615	0.09411	4.196
MDCOUNSL	0.1024668	0.04756	0.09859	1.080
NEWPATPB	0.1133333	0.06777	0.12718	0.794
OLDPATPB	-0.1244134	-0.08177	0.12760	0.951
DIAG20	-0.5332046D-01	-0.03151	0.13418	0.158
SOLO	0.2531801	0.17583	0.10165	6.204
PARTNER	0.2687089	0.14226	0.11912	5.088
GROUP	0.6709167D-01	0.03552	0.11986	0.313
LOWPAIN	0.1538163	0.05109	0.15335	1.006
BACKPAIN	0.2983112	0.07687	0.18895	2.493
SORETHRT	-0.7070555	-0.10952	0.33406	4.480
UPPRPAIN	0.2232866	0.07650	0.15155	2.171
ABDOPAIN	0.1194506	0.02600	0.22775	0.275
FATIGUE	-0.1349886D-01	-0.00148	0.41616	0.001
HEADACHE	0.1041231	0.00935	0.57414	0.033
CHSTPAIN	-0.3989463	-0.03583	0.51532	0.599
FACEPAIN	0.3032487D-01	0.00711	0.19942	0.023
FEVER	0.9693398D-01	0.00871	0.53137	0.033
VERTIGO	0.2724967	0.02447	0.50002	0.297
SWELLING	0.1333175	0.03128	0.21671	0.378
BREATHLS	0.7729651	0.04914	0.71212	1.178
DIAG00	0.1951777	0.03691	0.25452	0.588
DIAG01	0.2192787	0.01969	0.50886	0.186
DIAG02	-0.6993994D-01	-0.02323	0.17601	0.158
DIAG03	-0.3578316	-0.05065	0.33189	1.162
DIAG05	0.4503978	0.04045	0.57486	0.614
DIAG06	0.1564960	0.03045	0.14151	1.223
DIAG07	-0.1499439D-01	-0.00299	0.25347	0.003
DIAG08	0.5700224D-01	0.01697	0.21481	0.070
DIAG09	-0.1399826	-0.04081	0.19968	0.491
DIAG10	0.6162195D-01	0.01757	0.21377	0.083
DIAG11	-0.8797323D-01	-0.01991	0.24312	0.131
DIAG12	0.4567963D-01	0.01034	0.22628	0.041
DIAG14	-0.1150907	-0.02880	0.20940	0.302
DIAG15	-0.7425371D-01	-0.02924	0.14359	0.267
DIAG16	0.5854824	0.06433	0.41728	1.969
DIAG18	0.3289334	0.08232	0.20842	2.491
(CONSTANT)	2.173639			

TABLE 16

REGRESSION ANALYSIS
LOG OF PATIENT VISIT LENGTH AS A FUNCTION OF PATIENT BACKGROUND AND SYMPTOMS, DIAGNOSTIC (ICDA) CATEGORIES AND SERVICES PERFORMED AND CASE DISPOSITION
(All Surgeons Grouped)

```
MULTIPLE R          0.47400
R SQUARE            0.22468
ADJUSTED R SQUARE   0.12130
STANDARD ERROR      0.67514


---------------- VARIABLES IN THE EQUATION -----------------

VARIABLE          B             BETA      STD ERROR B       F

AGE         0.3664546D-02     0.10272       0.00168       4.737
SEX        -0.5515705D-02    -0.00383       0.06687       0.007
RACE        0.3356199D-01     0.01390       0.11087       0.092
ACUTEPRB    0.7823634D-01     0.04692       0.10859       0.519
ACUTERET    0.2417196D-01     0.01261       0.10600       0.052
CHRNROUT    0.1115463         0.06334       0.09729       1.315
CHRNSUDN    0.6495161D-01     0.02837       0.13036       0.248
WELLEXAM    0.1352463         0.03856       0.17210       0.618
NOSERVIC    0.8638672D-01     0.02676       0.15930       0.294
LIMTDHST   -0.2152127        -0.14942       0.07924       7.376
GENRLHST    0.1603773         0.07697       0.12003       1.785
CLINTEST    0.8134040D-01     0.03523       0.13295       0.374
BLOODPRS    0.3586368         0.14424       0.12632       8.060
OFFCSURG   -0.8451877D-01    -0.04157       0.10219       0.684
DRUGRX     -0.1569641        -0.08643       0.09570       2.690
MDCOUNSL    0.1040579         0.04830       0.09993       1.084
NOFOLLUP   -0.9006538D-01    -0.03731       0.14784       0.371
RETPLAND   -0.1273380        -0.08694       0.10628       1.436
RETIFNEC   -0.2510209        -0.13934       0.12037       4.349
REFERDSP   -0.7698070D-01    -0.01926       0.18864       0.167
REFRBACK   -0.2953589D-01    -0.00643       0.22169       0.018
NEWPATFB    0.1041889         0.06231       0.12749       0.668
OLDPATPB   -0.1405283        -0.09236       0.12869       1.192
DIAG20     -0.3946836D-01    -0.02332       0.13591       0.084
SOLO        0.2479106         0.17218       0.10205       5.901
PARTNER     0.2649601         0.14027       0.11961       4.907
GROUP       0.7016218D-01     0.03715       0.12111       0.336
LOWPAIN     0.1644275         0.05461       0.15401       1.140
BACKPAIN    0.2659479         0.06853       0.19005       1.958
SORETHRT   -0.6800159        -0.10533       0.33774       4.054
UPPRPAIN    0.2324027         0.07963       0.15233       2.328
ABDOPAIN    0.1693240         0.03686       0.23068       0.539
FATIGUE     0.2988493D-01     0.00328       0.41705       0.005
HEADACHE    0.1565834         0.01406       0.58374       0.072
CHSTPAIN   -0.4841466        -0.04348       0.52750       0.842
FACEPAIN    0.5055013D-01     0.01186       0.20072       0.063
FEVER       0.1792290D-01     0.00161       0.53334       0.001
VERTIGO     0.2208778         0.01984       0.50129       0.194
SWELLING    0.1127573         0.02645       0.21777       0.268
BREATHLS    0.7598213         0.04830       0.71406       1.132

DIAG00      0.2004583         0.03791       0.25590       0.614
DIAG01      0.2491294         0.02237       0.50934       0.239
DIAG02     -0.8545608D-01    -0.02838       0.17663       0.234
DIAG03     -0.2903697        -0.04110       0.33771       0.739
DIAG05      0.3611811         0.03244       0.59549       0.368
DIAG06      0.1721144         0.08547       0.14207       1.468
DIAG07      0.9121522D-02     0.00182       0.25429       0.001
DIAG08      0.8580634D-01     0.02555       0.21603       0.158
DIAG09     -0.1520496        -0.04433       0.20132       0.570
DIAG10      0.6665925D-01     0.01901       0.21442       0.097
DIAG11     -0.6767557D-01    -0.01532       0.24371       0.077
DIAG12      0.4313575D-01     0.00976       0.22786       0.036
DIAG14     -0.1140431        -0.02854       0.20975       0.296
DIAG15     -0.6282990D-01    -0.02475       0.14456       0.189
DIAG16      0.5980420         0.06571       0.41801       2.047
DIAG18      0.3500061         0.08759       0.20946       2.792
(CONSTANT)  2.293003
```

TABLE 17

REGRESSION ANALYSIS
LOG OF PATIENT VISIT LENGTH AS A FUNCTION OF PATIENT BACKGROUND AND SYMPTOMS
(All Specialties)

```
MULTIPLE R              0.30928
R SQUARE                0.09566
ADJUSTED R SQUARE       0.07539
STANDARD ERROR          0.74954


----------------- VARIABLES IN THE EQUATION ------------------

VARIABLE             B               BETA      STD ERROR B        F

AGE          0.4346859D-02     0.11975         0.00107       16.404
SEX         -0.2465119D-01    -0.01575         0.04427        0.310
RACE         0.1283144         0.04983         0.07279        3.107
ACUTEPRB     0.1916024D-01     0.01130         0.07034        0.074
ACUTERET    -0.4599606D-01    -0.02112         0.07866        0.342
CHRNROUT     0.1001699         0.05608         0.06664        2.260
CHRNSUDN     0.2220384         0.09163         0.08259        7.227
WELLEXAM     0.3242884         0.09805         0.10107       10.295
NEWPATPB     0.2354726         0.11885         0.07315       10.362
OLDPATPB    -0.1502782        -0.09320         0.07087        4.496
SOLO         0.4726266D-01     0.02993         0.07552        0.392
PARTNER      0.1390237         0.06611         0.08863        2.460
GROUP       -0.1639549D-02    -0.00076         0.08938        0.000
LOWPAIN      0.2223618         0.05733         0.11128        3.993
BACKPAIN     0.2272566         0.05358         0.12100        3.528
SORETHRT    -0.1949662        -0.03522         0.15903        1.503
UPPRPAIN     0.8685821D-01     0.02343         0.10647        0.665
ABDOPAIN     0.1680962         0.03441         0.13884        1.466
FATIGUE      0.3635546         0.05212         0.19747        3.389
HEADACHE     0.2596486D-01     0.00469         0.15736        0.027
CHSTPAIN     0.3995990         0.07364         0.15429        6.708
FACEPAIN     0.8774657D-01     0.01519         0.16350        0.288
FEVER        0.2790360D-01     0.00400         0.19843        0.020
VERTIGO      0.3735655         0.05176         0.20509        3.318
SWELLING     0.3900687D-01     0.00628         0.17769        0.048
BREATHLS     0.3775534         0.05922         0.18096        4.353
(CONSTANT)   2.069803
```

TABLE 18

REGRESSION ANALYSIS
LOG OF PATIENT VISIT LENGTH AS A FUNCTION OF PATIENT BACKGROUND AND SYMPTOMS
AND
DIAGNOSTIC (ICDA) CATEGORIES
(All Specialties)

```
MULTIPLE R           0.35313
R SQUARE             0.12470
ADJUSTED R SQUARE    0.09097
STANDARD ERROR       0.74319

----------------- VARIABLES IN THE EQUATION ------------------

VARIABLE          B             BETA      STD ERROR B       F

AGE          0.3813863D-02    0.10506       0.00113      11.374
SEX         -0.3730719D-01   -0.02384       0.04500       0.687
RACE         0.1246003        0.04838       0.07280       2.929
ACUTEPRB     0.1478761D-01    0.00871       0.07505       0.039
ACUTERET    -0.6659296D-01   -0.03058       0.08091       0.677
CHRNRCUT     0.6986502D-01    0.04050       0.07127       0.961
CHRNSUDN     0.1861276        0.07681       0.08596       4.688
WELLEXAM     0.2924154        0.08841       0.10186       8.241
NEWPATFB     0.2127598        0.10739       0.07331       8.422
OLDPATFB    -0.1496750       -0.09282       0.07091       4.456
DIAG20       0.1576260D-01    0.00746       0.10269       0.024
SOLO         0.8364963D-01    0.05298       0.07591       1.214
PARTNER      0.1789059        0.08508       0.08886       4.054
GROUP        0.1617562D-01    0.00753       0.09012       0.032
LOWPAIN      0.2715196        0.07000       0.11961       5.153
BACKPAIN     0.2558611        0.06067       0.13395       3.648
SORETHRT    -0.1307360       -0.02362       0.16544       0.624
UPPRPAIN     0.1373898        0.03707       0.11609       1.401
ABDOPAIN     0.7497455D-01    0.01535       0.15335       0.239
FATIGUE      0.2820165        0.04043       0.20135       1.962
HEADACHE    -0.6069576D-01   -0.01096       0.15832       0.147
CHSTPAIN     0.3906085        0.07198       0.15596       6.273
FACEPAIN     0.1299785        0.02250       0.17000       0.585
FEVER        0.4113703D-01    0.00590       0.20004       0.042
VERTIGO      0.2807937        0.03891       0.20569       1.864
SWELLING     0.1475425        0.02376       0.18513       0.635
BREATHLS     0.4331944        0.06794       0.18347       5.575
DIAG00       0.5649876D-01    0.01192       0.15576       0.132
DIAG01       0.6901785D-01    0.00574       0.34402       0.040
DIAG02       0.1515359        0.03634       0.14438       1.102
DIAG03       0.9337251D-01    0.02407       0.13737       0.462
DIAG04       0.2394902        0.01261       0.54397       0.194
DIAG05       0.5615006        0.08310       0.20767       7.311
DIAG06       0.1924008        0.07072       0.11028       3.044
DIAG07       0.9528013D-01    0.03713       0.11280       0.713
DIAG08      -0.1471076D-01   -0.00613       0.10899       0.018
DIAG09       0.2261074        0.06154       0.13977       2.664
DIAG10       0.1681949        0.03443       0.15962       1.110
DIAG11       0.1132333        0.01727       0.20104       0.317
DIAG12       0.1861085        0.03688       0.16284       1.306
DIAG14      -0.2115968       -0.06440       0.12143       3.036
DIAG15       0.7228297D-01    0.02529       0.10671       0.459
DIAG16       0.6756524        0.06639       0.29730       5.165
DIAG18       0.3739342        0.09912       0.13168       8.064
(CONSTANT)   2.010369
```

TABLE 19

REGRESSION ANALYSIS
LOG OF PATIENT VISIT LENGTH AS A FUNCTION OF PATIENT BACKGROUND AND SYMPTOMS AND DIAGNOSTIC (ICDA) CATEGORIES AND SERVICES PERFORMED
(All Specialties)

MULTIPLE R	0.44792
R SQUARE	0.20063
ADJUSTED R SQUARE	0.16398
STANDARD ERROR	0.71273

------------------ VARIABLES IN THE EQUATION ------------------

VARIABLE	B	BETA	STD ERROR B	F
AGE	0.3245329D-02	0.08940	0.00110	8.711
SEX	-0.1382358D-01	-0.00883	0.04351	0.101
RACE	0.1382771	0.05370	0.07018	3.883
ACUTEPRB	0.2068911D-02	0.00122	0.07442	0.001
ACUTERET	-0.5673305D-01	-0.02606	0.07835	0.524
CHRNROUT	0.3859738D-01	0.02238	0.06965	0.307
CHRNSUDN	0.1564583	0.06457	0.08419	3.453
WELLEXAM	0.8284712D-01	0.02505	0.10140	0.668
NOSERVIC	0.1411202	0.03268	0.12498	1.275
LIMTDHST	-0.6972591D-02	-0.00445	0.05175	0.018
GENRLHST	0.4325717	0.20225	0.07363	34.518
CLINTEST	0.2038805	0.10410	0.06109	11.139
BLOODPRS	0.1255731	0.07443	0.05609	5.012
OFFCSURG	0.7148430D-01	0.02560	0.08210	0.758
DRUGRX	-0.1318935D-01	-0.00819	0.04976	0.070
MDCOUNSL	0.2070776	0.09554	0.05941	12.151
NEWPATFB	0.1737656	0.08771	0.07108	5.975
OLDPATFB	-0.8935850D-01	-0.05542	0.06845	1.704
DIAG20	-0.4615520D-01	-0.02186	0.09945	0.215
SOLO	0.8522561D-01	0.05398	0.07348	1.345
PARTNER	0.1631390	0.07758	0.08576	3.618
GROUP	0.2105268D-01	0.00980	0.08690	0.059
LOWPAIN	0.2775639	0.07156	0.11561	5.764
BACKPAIN	0.2975195	0.07054	0.12901	5.318
SORETHRT	-0.9029598D-01	-0.01631	0.15970	0.320
UPPRPAIN	0.1417234	0.03824	0.11169	1.610
ABDOPAIN	0.1646013D-01	0.00337	0.14782	0.012
FATIGUE	0.2150236	0.03083	0.19383	1.231
HEADACHE	-0.8067652D-01	-0.01457	0.15225	0.281
CHSTPAIN	0.3384188	0.06237	0.15083	5.035
FACEPAIN	0.1320373	0.02286	0.16377	0.650
FEVER	-0.7468123D-02	-0.00107	0.19218	0.002
VERTIGO	0.1665569	0.02308	0.19874	0.702
SWELLING	0.2149053	0.03462	0.17951	1.433
BREATHLS	0.4137022	0.06489	0.17742	5.437
DIAG00	-0.7633784D-02	-0.00161	0.14999	0.003
DIAG01	0.1559830	0.01297	0.33305	0.219
DIAG02	0.5752782D-01	0.01380	0.13919	0.171
DIAG03	-0.7647545D-01	-0.01972	0.13612	0.316
DIAG04	-0.1731095	-0.00911	0.52544	0.109
DIAG05	0.5071743	0.07506	0.20095	6.370
DIAG06	0.1936080	0.07116	0.10727	3.258
DIAG07	0.3166880D-02	0.00123	0.11111	0.001
DIAG08	-0.4922798D-01	-0.02050	0.10707	0.211
DIAG09	0.1876486	0.05063	0.13477	1.939
DIAG10	-0.2299256D-01	-0.00471	0.15781	0.021
DIAG11	-0.4707665D-01	-0.00718	0.19682	0.057
DIAG12	0.4320556D-01	0.00856	0.15766	0.075
DIAG14	-0.1985125	-0.06042	0.11810	2.825
DIAG15	0.6150450D-02	0.00215	0.10365	0.004
DIAG16	0.6145991	0.06039	0.28579	4.625
DIAG18	0.2457558	0.06514	0.12827	3.671
(CONSTANT)	1.889865			

TABLE 20

REGRESSION ANALYSIS
LOG OF PATIENT VISIT LENGTH AS A FUNCTION OF PATIENT BACKGROUND AND SYMPTOMS, DIAGNOSTIC (ICDA) CATEGORIES AND SERVICES PERFORMED AND CASE DISPOSITION
(All Specialties)

MULTIPLE R	0.46455
R SQUARE	0.21580
ADJUSTED R SQUARE	0.17621
STANDARD ERROR	0.70749

----------------- VARIABLES IN THE EQUATION ------------------

VARIABLE	B	BETA	STD ERROR B	F
AGE	0.3465461D-02	0.09547	0.00110	9.981
SEX	-0.1272103D-01	-0.00813	0.04326	0.086
RACE	0.1409184	0.05472	0.06973	4.084
ACUTEPRB	0.4892080D-02	0.00288	0.07413	0.004
ACUTERET	-0.6756579D-01	-0.03103	0.07790	0.752
CHRNROUT	0.3914301D-01	0.02269	0.06947	0.318
CHRNSUDN	0.1599736	0.06602	0.08378	3.646
WELLEXAM	0.9962086D-01	0.03012	0.10123	0.969
NOSERVIC	0.1536593	0.03559	0.12435	1.527
LIMTDHST	-0.2502474D-02	-0.00160	0.05149	0.002
GENRLHST	0.4203629	0.19655	0.07357	32.644
CLINTEST	0.2152833	0.10992	0.06081	12.532
BLOODPRS	0.1166938	0.06916	0.05574	4.383
OFFCSURG	0.5527583D-01	0.01979	0.08197	0.455
DRUGRX	0.4823731D-02	0.00300	0.05042	0.009
MDCOUNSL	0.2132763	0.09840	0.05935	12.913
NOFOLLUP	-0.1257744	-0.05108	0.09664	1.694
RETPLAND	-0.2226599D-01	-0.01408	0.07704	0.084
RETIFNEC	-0.2675139	-0.14220	0.08250	10.515
REFERDSP	-0.8688164D-01	-0.02060	0.12143	0.512
REFRBACK	-0.4401245D-01	-0.00690	0.17702	0.062
NEWPATPB	0.1593160	0.08041	0.07065	5.086
OLDPATPB	-0.1289515	-0.07997	0.06934	3.458
DIAG20	-0.5360548D-01	-0.02539	0.09950	0.290
SOLO	0.7329640D-01	0.04642	0.07314	1.004
PARTNER	0.1316972	0.06263	0.08549	2.373
GROUP	0.1116128D-01	0.00520	0.08675	0.017
LOWPAIN	0.2742820	0.07071	0.11510	5.679
BACKPAIN	0.2839697	0.06733	0.12645	4.887
SORETHRT	-0.9462624D-01	-0.01709	0.15871	0.355
UPPRPAIN	0.1433733	0.03868	0.11111	1.665
ABDOPAIN	0.3797755D-01	0.00777	0.14722	0.067
FATIGUE	0.1949724	0.02795	0.19262	1.022
HEADACHE	-0.8718528D-01	-0.01575	0.15194	0.329
CHSTPAIN	0.3681789	0.06785	0.15071	5.968
FACEPAIN	0.1328578	0.02300	0.16290	0.665
FEVER	0.2548713D-01	0.00365	0.19104	0.018
VERTIGO	0.1178233	0.01633	0.19780	0.355
SWELLING	0.1628805	0.02624	0.17900	0.828
BREATHLS	0.3418198	0.05361	0.17699	3.730
DIAG00	0.2558276D-01	0.00540	0.14921	0.029
DIAG01	0.1582236	0.01315	0.33102	0.228
DIAG02	0.2168528D-01	0.00520	0.13883	0.024
DIAG03	-0.1131225	-0.02916	0.13571	0.695
DIAG04	-0.2329911	-0.01226	0.52197	0.199
DIAG05	0.5336165	0.07897	0.20247	6.946
DIAG06	0.1971468	0.07246	0.10671	3.413
DIAG07	-0.3445429D-01	-0.01343	0.11108	0.096
DIAG08	-0.2640006D-01	-0.01100	0.10661	0.061
DIAG09	0.1835168	0.04951	0.13451	1.862
DIAG10	-0.2510594D-01	-0.00514	0.15745	0.025
DIAG11	-0.4515776D-01	-0.00689	0.19573	0.053
DIAG12	0.3153464D-01	0.00625	0.15716	0.040
DIAG14	-0.2114844	-0.06437	0.11768	3.230
DIAG15	0.9100406D-02	0.00318	0.10331	0.008
DIAG16	0.5626279	0.05529	0.28443	3.913
DIAG18	0.2497591	0.06620	0.12774	3.823
(CONSTANT)	2.007374			

TABLE 21

THE IMPACT OF VISIT CHARACTERISTICS ON LENGTH OF VISIT[1]

(ENTRIES ARE F-STATISTICS)
(NUMBERS IN PARENTHESES ARE CUTOFF POINTS AT 5% GIVEN D.F.)

DESCRIPTION OF VARIABLE GROUP	GENERAL & FAMILY PRACTICE (N=315)	INTERNAL MEDICINE & SPECIALTIES (N=395)	SURGERY & SURGICAL SPECIALTIES (N=477)	ALL SPECIALTIES COMBINED (N=1187)	TEST FOR HOMOGENEITY ACROSS SPECIALTIES
1. BASE VARIABLES PATIENT BACKGROUND AND COMPLAINT	1.276 (1.55)	3.638 (1.55)	2.365 (1.55)	4.719 (1.50)	4.260 (1.50)
2. ADDED VARIABLES: PHYSICIAN DIAGNOSIS (GIVEN VARS. IN 1 ABOVE)	0.841 (1.73)	1.973 (1.73)	0.796 (1.73)	2.372 (1.67)	3.076 (1.45)
3. ADDED VARIABLES: CHOICE OF PROCEDURE (GIVEN VARS. IN 1&2 ABOVE)	2.965 (1.98)	10.917 (1.98)	4.779 (1.98)	13.488 (1.98)	3.512 (1.40)
4. ADDED VARIABLES: DISPOSTION OF CASE (GIVEN VARS. IN 1,2&3 ABOVE)	2.204 (2.26)	1.961 (2.26)	0.954 (2.26)	4.376 (2.20)	3.275 (1.38)

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[1] THESE F-STATISTICS ARE DERIVED FROM THE STATISTICS IN TABLE 5-20. IN THE 16 CELLS ON THE LEFT, EACH STATISTIC TESTS THE HYPOTHESIS THAT THE SET OF BASE OR ADDITIONAL VARIABLES EXPLAINS A SIGNIFICANT AMOUNT OF VARIATION IN LENGTH OF STAY. THUS, IN ROW 3 FOR GENERAL PRACTICE, THE NULL HYPOTHESIS IS THAT THE ADDED VARIABLES RELATING TO CASE DISPOSITION DO NOT EXPLAIN A SIGNIFICANT ADDITIONAL AMOUNT OF VARIATION GIVEN THE VARIATION EXPLAINED BY PHYSICIAN DIAGNOSIS, PATIENT BACKGROUND AND COMPLAINT; THE F-STATISTIC OF 2.965, GIVEN THE CUTOFF OF 1.98, INDICATES THAT THE NULL HYPOTHESIS IS REJECTED WITH 5 PERCENT CONFIDENCE. THE 4 CELLS ON THE RIGHT TEST HOMOGENEITY ACROSS SPECIALTIES FOR THE MODEL SPECIFIED IN A GIVEN ROW.

TABLE 22

THE RELATION BETWEEN VISIT LENGTH AND OFFICE PROCEDURES (A COMPARISON OF RESULTS FROM N.A.M.C.S. AND P.P.C.S.)

DEPENDENT VARIABLE: LENGTH OF OFFICE VISIT (IN MINUTES)
(STANDARD ERRORS IN PARENTHESES)

	N.A.M.C.S.	P.P.C.S.
1. INTERCEPT	7.881	19.397
	(1.762)	(1.301)
2. LAB TESTS	3.252	4.639
	(0.347)	(1.668)
3. INJECTION	-1.271	-10.770
	(0.977)	(2.073)
4. X-RAY	7.967	7.968
	(1.067)	(2.358)
5. OFFICE SURGERY	0.675	-17.039
	(1.222)	(3.769)
6. INTERNAL MEDICINE	4.251	3.931
	(0.981)	(1.653)
7. INT. MED. SPECIALTIES	7.956	8.220
	(1.265)	(1.496)
8. GENERAL SURGERY	2.143	2.099
	(1.067)	(1.069)
9. SURGICAL SPECIALTIES	3.478	1.061
	(0.888)	(1.419)
N	1187	1925
STANDARD ERROR	11.276	19.744
R^2	0.182	0.047
F-STATISTIC	32.713	11.910

F-STATISTICS FOR HYPOTHESES THAT P.P.C.S. COEFFICIENT(S) ARE EQUAL TO N.A.M.C. COEFFICIENTS

1.	EQUALITY OF COEFFICIENT 1 (LAB TESTS)	0.692
2.	SIMULTANEOUS EQUALITY OF COEFFICIENTS 1 (LAB TESTS) THROUGH 5 (OFFICE SURGERY)	10.245

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